U.S. Environmental Protection Agency
Office of Solid Waste
Contract No. 68-W9-0041

RCRA FACILITY ASSESSMENT REPORT
MOBIL CHEMICAL COMPANY
TEMPLE, TEXAS
TXD052121068

RCRA Implementation Contract
Zone II
Regions VI-X

PRC Environmental Management, Inc.

In Association with:
NUS Corporation
ICF Technology, Inc.
Versar, Inc.
Ecology & Environment, Inc.
HydroGeoLogic, Inc.

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Prepared for

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DISCLAIMER

This report was prepared for the U.S. Environmental Protection Agency (EPA), Region VI by PRC Environmental Management, Inc. and ICF Incorporated in fulfillment of Contract No. 68-W9-0041, Work Assignment No. R2646, Project No. 01. The opinions, findings, and conclusions expressed herein are those of the contractor and not necessarily those of EPA or other cooperating agencies. Mention of company or product names is not to be considered as an endorsement by EPA.

This document is intended to assist EPA and state personnel in developing requirements for a Resource Conservation and Recovery Act (RCRA)-regulated facility owner or operator to conduct a RCRA Facility Investigation (RFI) pursuant to Title 40, Code of Federal Regulations (CFR), Part 264. EPA will not necessarily limit the RFI or other requirements to those that correspond with the recommendations set forth herein. EPA and state personnel must exercise their technical judgment in using the RCRA Facility Assessment report, as well as other relevant information, in determining what RFI or other requirements to include in a permit or order.

EXECUTIVE SUMMARY

ICF Incorporated (ICF), conducted a Resource Conservation and Recovery Act (RCRA) Facility Assessment (RFA) of Mobile Chemical Company in Temple, Texas. The RFA included a preliminary document review (PR), followed by a visual site inspection (VSI). Files were inspected during the PR at the Texas Water Commission (TWC) and the U.S. Environmental Protection Agency (EPA) Region VI offices. The PR was followed by a VSI to (1) determine the facility's current operating status, (2) identify solid waste management units (SWMUs) and areas of concern (AOC), (3) assess the regulatory compliance of those units, and (4) assess actual and potential releases to the environment from those units.

The Mobil Chemical Company facility in Temple, Texas is comprised of two plants: (1) the General Products plant, built in 1970; and (2) the Polystyrene Foam Products plant, built in 1976. The facility produces polyethylene products such as stretch-wrap film, garbage bags, lawn bags, vegetable sacks, plastic grocery sacks, delicatessen containers, and industrial liners. Polystyrene products manufactured at the plant include foam plates, "clam shell" fast-food containers, and meat trays.

Mobil Chemical Company generates two hazardous wastes and numerous nonhazardous wastes during its manufacturing processes. Polystyrene sludge is generated as part of a recycling process for pentane that is used as a blowing agent in the manufacture of polystyrene packaging. Hazardous waste (spent solvent) is also generated at both plants during routine parts-cleaning operations. The polystyrene sludge waste is disposed of off-site. The spent solvents from part-cleaning operations are picked up by an outside contractor for recycle. Nonhazardous wastes are generated during routine plant operations, and include oily wastes, ink solids, construction debris, waste water, and general plant debris.

Mobil Chemical Company submitted a RCRA Part A Hazardous Waste Permit Application on November 18, 1980. The facility was granted interim status in June 1981 pursuant to Section 3005 of RCRA. Interim status was granted for a 4,000 gallon underground hazardous waste storage tank. This hazardous waste storage tank was closed in August 1991, in accordance with an approved closure plan (with amendments). The facility is still waiting for a certification letter from TWC. (Ref. 3) On September 27, 1991, Mobil Chemical Company filed a petition requesting that interim status for the facility be withdrawn because hazardous waste was no longer stored on-site for greater than 90 days. According to facility representatives, Mobil Chemical Company's interim status was withdrawn on December 11, 1991. Facility representatives did not provide documentation that the withdrawal of interim status had been granted by EPA.

ICF identified 15 potential SWMUs during the PR. Based on the VSI, the potential SWMUs were increased to 28, and 1 AOC was added. The SWMU list was refined by (1) combining similar SWMUs, (2) deleting nonexistent SWMUs, and (3) adding new SWMUs. Of the 28 SWMUs and 1 AOC, 1 is inactive and 4 require further action.

SWMUs requiring further action include SWMU 11, SWMU 19, SWMU 27, and AOC 1. Investigation at SWMU 11 should include sampling to verify the hazardous or nonhazardous nature of the dust identified on the concrete pad during the VSI conducted on January 6, 1992, possibly followed by an RFI. The facility should replace the faulty valve on the knock-out pot component of SWMU 19 to prevent further releases to the city sewer drain. An RFI should be conducted for the SWMU 27 because the unit, which is unlined and has no secondary containment structure, managed waste containing hazardous constituents. The facility should continue to coordinate with EPA, TWC, and the City of Temple to remediate the area around AOC 1 and close the unit.

1.0 INTRODUCTION

ICF Incorporated (ICF), a subcontractor to PRC Environmental Management, Inc. (PRC), received Work Assignment No. R2646, Project No. 01 from the U.S. Environmental Protection Agency (EPA) under Contract No. 68-W9-0041. Under this work assignment, ICF is contracted to provide technical support on a Resource Conservation and Recovery Act (RCRA) Facility Assessment (RFA) for the Mobil Chemical Company facility in Temple, Texas.

This report describes the findings of a preliminary review (PR) and a visual site inspection (VSI). It includes (1) a description of the facility and its solid waste management units, (2) an identification of waste release by migration pathways, and (3) a summary of conclusions and recommendations regarding further RFI activity.

1.1 PURPOSE OF THE RCRA FACILITY ASSESSMENT

The purpose of the RFA is to identify environmental releases or potential releases from solid waste management units (SWMUs) that may require corrective action. The RFA is the first step in implementing the corrective action provisions of the 1984 Hazardous and Solid Waste Amendments (HSWA) to the Resource Conservation and Recovery Act (RCRA). Specifically, Sections 3004(u), 3004(v), and 3008(h) grant EPA the authority to initiate corrective action for releases of hazardous wastes and constituents from SWMUs at RCRA-regulated facilities. An RFA generally consists of (1) a preliminary review (PR), (2) a visual site inspection (VSI), and, if necessary, (3) a sampling visit (SV). A sampling visit is conducted only when available information is insufficient to support a recommendation for a RCRA facility investigation (RFI). The RFA at Mobil Chemical Company did not include sampling.

According to EPA's RFA Guidance Document (Ref. 7), the four purposes of an RFA are as follows:

1) Identify and gather information on releases at RCRA-regulated facilities.

2) Evaluate SWMUs and other areas of concern (AOC) for releases to all media, and regulated units for releases to media other than ground water.

3) Make preliminary determinations regarding releases of concern and the need for further actions and interim measures at the facility.

4) Screen from further investigation those SWMUs and AOCs that do not pose a threat to human health and the environment.

An RFA is performed when RCRA permits are requested or modified, or when the facility ceases its management of RCRA-regulated solid wastes. An RFA was performed at Mobil Chemical Company because the facility submitted a Part A Permit application and was granted interim status in June 1981, even though interim status was withdrawn at the facility's request on December 11, 1991. Facility representatives were not able to provide documentation that the withdrawal of interim status had been approved by EPA.

1.2 PROCEDURES

The RFA was conducted in accordance with procedures outlined in EPA's RFA Guidance document. (Ref. 7) ICF conducted the PR at TWC in Austin, Texas and at EPA's Region VI office in Dallas, Texas the week of December 2, 1991.

ICF reviewed documents relevant to the RCRA program. The main sources of information were (1) the RCRA Part A Permit Application, (2) general correspondence with state and federal agencies concerning the facility, and (3) various facility schematics. ICF used the information collected during the PR to prepare a list of potential SWMUs. ICF then submitted this potential list of SWMUs, along with a request for general facility information, through EPA to Mobil Chemical Company's representative, Mr. Dwight Clayton, for review and input. Mobil Chemical Company's response was received at the time of the VSI conducted January 6, 1992.

ICF conducted the VSI on January 6, 1992, at Mobil Chemical Company's Temple plant. Upon arrival at the facility, Mobil Chemical Company held a preliminary meeting to discuss its history, organization, and operations, and to answer questions concerning its hazardous waste management practices. ICF explained the purpose of the visit and discussed the RFA process. Meeting attendants included the following:

- Dwight Clayton - Mobil Chemical Company
- James Gavin - Mobil Chemical Company
- Patrick Mullin - Mobil Chemical Company
- Donald Hammer - ICF Incorporated
- Michael Lanz - ICF Incorporated

The VSI and follow-up telephone calls provided the information needed to make the recommendations presented in this report.

Photographs taken during the VSI are included as Appendix A.

1.3 REPORT

This report summarizes the information obtained during the PR and VSI and evaluates the information in terms of the RFA objectives. The facility is described in Section 2.0; the environmental setting is discussed in Section 3.0; the SWMUs and AOCs are identified in Section 4.0 and 5.0, respectively; potential human and environmental targets are described in Section 6.0; and conclusions and recommendations are presented in Section 7.0.

2.0 FACILITY DESCRIPTION

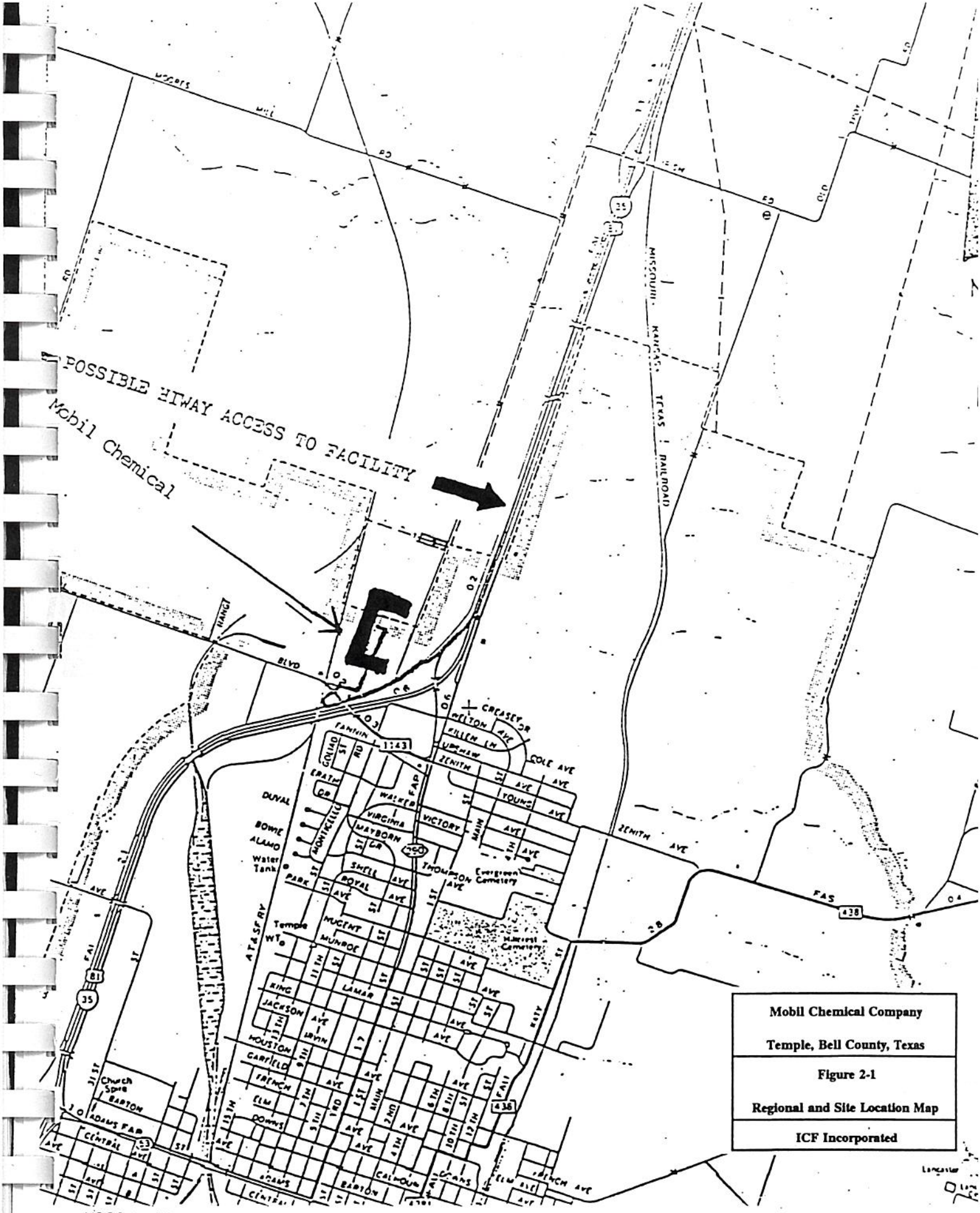
This section of the RFA report describes the location of the facility and its historical and current operations, provides a list of the identified SWMUs and AOCs, and describes the sources and types of wastes managed at the facility.

2.1 SITE LOCATION

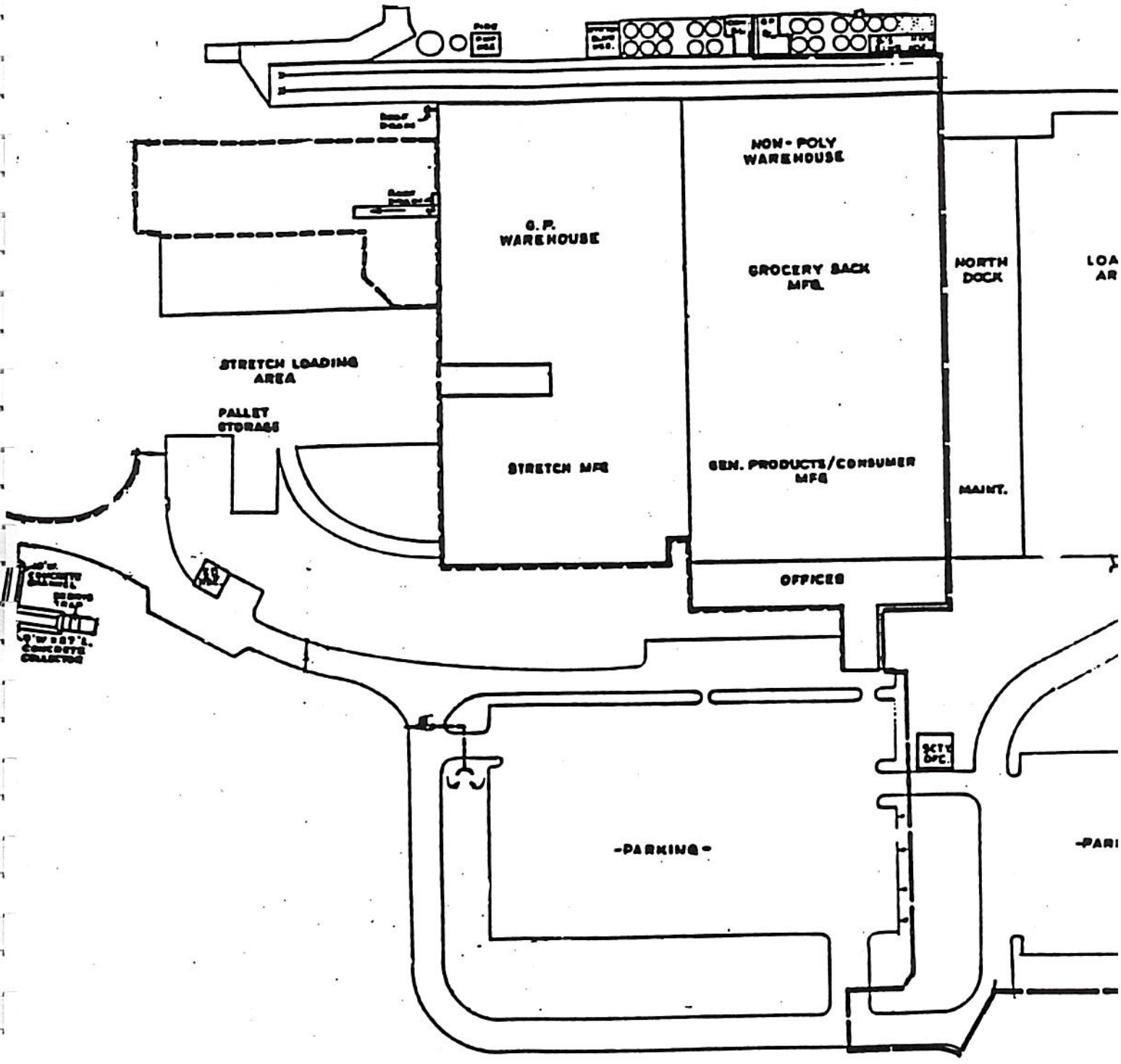
Mobil Chemical Company's facility is located within an industrial park in Temple, Bell County, Texas (Figure 1). It is located adjacent to Interstate 35 at the northwest corner of the intersection with Industrial Boulevard. Mobil Chemical Company's geographic coordinates are 31 degrees, 07 minutes, 45 seconds north latitude, and 97 degrees, 20 minutes, 15 seconds, west longitude. The site occupies approximately 104 acres, which include buildings housing manufacturing facilities and product warehouses for plastic film and foam products. Figure 2 outlines the approximate boundaries of Mobil Chemical Company's leased property. Figure 3 illustrates the locations of Mobil Chemical Company's buildings.

Standard facility data are provided below:

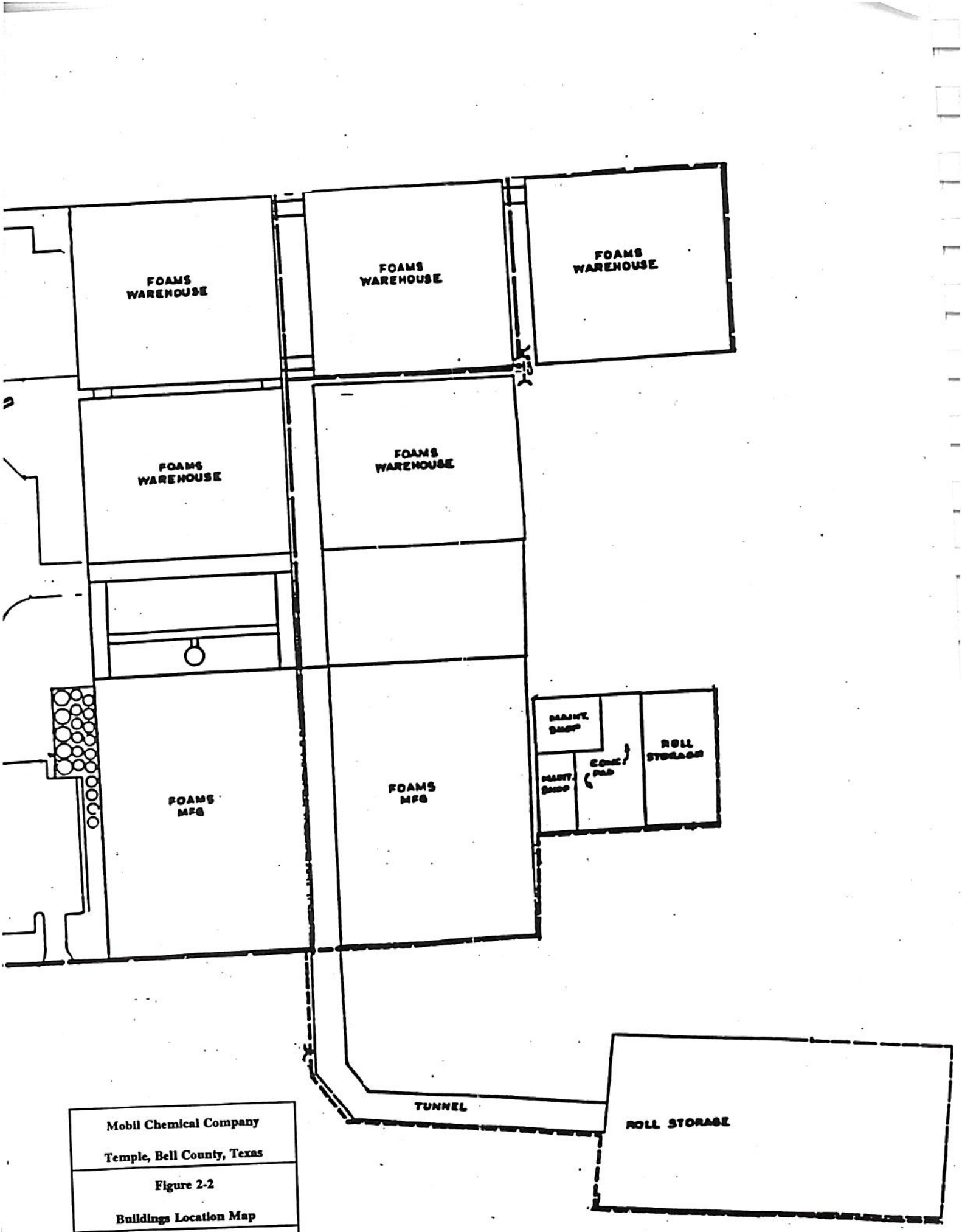
Facility Location:	Mobil Chemical Company Plastics Division Pegasus Drive Temple, Texas 76503
Facility Address:	3000 Pegasus Drive Temple, Texas 76503
Facility Contact:	Dwight Clayton
Telephone:	(817) 770-4330
EPA I.D. Number:	TXD052121068
TWC Reg. No.	32175



USGS 7.5 Minute Series Topographic Troy Triangle, 1974



Mobil Chemical Company, 1992



Mobil Chemical Company

Temple, Bell County, Texas

Figure 2-2

Buildings Location Map

ICF Incorporated

2.2 FACILITY OPERATIONS AND HAZARDOUS WASTE MANAGEMENT

The Mobil Chemical Company facility, located in Temple, Texas, is comprised of two plants: (1) the General Products plant, built in 1970; and (2) the Polystyrene Foam Products plant, built in 1976. The entire site comprises approximately 104 acres. Combined, both plants currently employ 863 full-time personnel. Additional temporary and contract services are used during peak periods and for major maintenance projects.

Mobil Chemical Company produces polyethylene products such as stretch-wrap film, garbage bags, lawn bags, vegetable sacks, plastic grocery sacks, delicatessen containers, and industrial liners. Polystyrene products include foam plates, "clam shell" fast-food containers, and meat trays.

2.2.1 General Products Plant

In the manufacturing of polyethylene film and bags, polyethylene resin pellets are melted in an extruder and forced through a die to form a continuous tube or sheet. The material is then cooled with air to form film, and slit to form sheets that are either wound on rolls or converted into bags. Some of the bags are then printed in a separate process using water-based inks, a recent change from using solvent-based inks. Trim and rejected product are recycled into the process.

The polyethylene resin pellets used in the film manufacturing process arrive in rail hopper cars each containing 200,000 lbs. The pellets are then transferred to storage silos. These pellets are nonhazardous. Dust generated during transfer of the resin is removed through the Foam Plant Air Abatement Units (SWMU 28).

2.2.2 Polystyrene Foam Products Plant

In the manufacturing of foam products, polystyrene resin pellets are melted in an extruder and forced through a die to form a continuous tube. Before exiting the die, isopentane and CO_2 are injected into the molten polystyrene. Polystyrene foam is created as the isopentane expands at the die and creates a cellular structure in the polystyrene. The tube is slit lengthwise to form a sheet which is wound into six foot diameter rolls. These rolls are stored and cured for 3 to 5 days. After curing, the foam sheet is formed into containers and printed as required by individual customers. The finished products are then stored in bags or boxes to await shipment. Foam trim from the forming process and the extrusion process is recycled.

The polystyrene resin pellets also arrive at the facility in hopper cars containing 200,000 pounds. The pellets are transferred to storage silos. Dust generated during transfer is removed through the Foam Plant Air Abatement Units (SWMU 28). The isopentane is brought to the facility via 25,000 gallon tank cars where it is pumped into an underground storage tank. The isopentane is then brought into the Foam plant by conveyance lines. Carbon dioxide, another blowing agent, is brought in by tank truck and stored in an above-ground pressurized and refrigerated storage tank.

2.2.3 Summary of Wastes Handled

The facility generates both hazardous and nonhazardous wastes. Polystyrene sludge is generated as part of a recycling process for pentane that is used as a blowing agent in the manufacture of polystyrene packaging. Hazardous waste (spent solvent) is also generated at both plants during routine parts-cleaning operations. The polystyrene sludge waste is disposed of off-

wastes are generated during routine plant operations, and include oily wastes, ink solids, construction debris, waste water, and general plant debris.The facility generates both hazardous and nonhazardous waste. The facility recycles 85 percent of the waste produced including used pentane, polystyrene and polyethylene pellets, and scrap product.

2.2.3.1 Hazardous Wastes - General Products Plant

Spent solvent is generated at the General Products plant. The plant utilizes Safety Kleen solvent baths for parts cleaning procedures. These stations are located throughout both plants, generally in the maintenance areas, the Grocery Sack department, and the Stretch manufacturing area. The units consist of a steel storage drum that contains the solvents. Each drum is topped with a steel bath structure where various parts from operations are cleansed. Once the cleaning is completed, the solvent drains back into the storage drum until needed. There are a total of 3 units that have a capacity of 30 gallons each, and 2 units each with a capacity of 60 gallons. The solvents are rented from Safety Kleen Corporation and are in use until they are picked up for recycle. The 30 gallon units are exchanged monthly and the 60 gallon units bi-weekly.

2.2.3.2 Hazardous Wastes - Polystyrene Foam Products Plant

Two hazardous wastes are generated at the Foam Plant; (1) polystyrene sludge, and (2) spent solvent. Polystyrene sludge is generated in the Foam plant from the recovery of isopentane during reclaim operations. Three Pentane Condenser Units (SWMU 19) receive polystyrene fluff generated during the manufacturing process. Excess foam scrap is pulverized into fluff. The fluff is then air conveyed to an extruder where air is squeezed out of the material and the material is then melted.

As the material melts, pentane gas is released. This gas is then cooled using chill water in a closed loop heat exchanger system. As the gas cools, the pentane is condensed into a liquid composed of water and styrene. This liquid is sent to an air bubbler where the water and pentane are separated.

The waste is sent to the Hazardous Waste Storage Area (SWMU 20) via three rubber hoses (one for each system). The pentane goes to the front end of the process for reuse. The three units generate 340 gallons of waste every 45 days. The pentane recycling system processes approximately 8 gallons of pentane per hour.

The waste sludge is ignitable (D001) with a flash point of less than 140 degrees fahrenheit and contains trace amounts of spent solvent (F005) generated during routine cleaning of the pentane reclamation system. The solvent used in the cleaning process contains methyl ethyl ketone, toluene, and xylene. The waste from the reclamation unit is approximately 97 percent water, 1 percent styrene, and 2 percent other organics. The facility generates an annual volume of 3,300 gallons of this waste.

Spent solvent is also generated at the Foam plant. The plant utilizes Safety Kleen solvent baths for parts cleaning procedures. These stations are located in the maintenance areas of the plant. The units consist of a steel storage drum that contains the solvents. Each drum is topped with a steel bath structure where various parts from operations are cleansed. Once the cleaning is completed, the solvent drains back into the storage drum until needed. There are a total of 2 units that have a capacity of 30 gallons each. The solvents are rented from Safety Kleen Corporation and are in use until they are picked up for recycle. The 30 gallon units are exchanged monthly.

2.2.3.3 Nonhazardous Wastes - General Products Plant and Foam Plant

Plant operations generate a variety of nonhazardous wastes consisting of; (1) general plant refuse, (2) waste oil/oil filters/absorbent, (3) ink waste/wastewater, (4) construction debris/scrap metal, (5) filter bags, and (6) polybutene wastewater.

Table 2-1 provides a summary of the hazardous and nonhazardous wastes generated at both plants, the current disposal methods, and the approximate amounts of each waste generated annually.

Table 2-1

Waste Management Summary

Mobil Chemical Company
Temple, Texas

Waste Stream	Disposal Method	Annual Quantity
Hazardous Wastes		
Polystyrene sludge	Drum storage area, sent to Gibralter Chemical resources for fuel blending	3.6 tons
Maintenance Solvent (Safety Kleen)	Picked-up and recycled by Safety Kleen every two weeks	11.25 tons
Nonhazardous Wastes		
Filter bags from baghouse system	Sent to Temple landfill	unknown
General plant refuse	Trash compactor units/open-type dumpster Sent off-site	686 tons
Waste oil	Drum storage area, sent to Gibralter Chemical Resources for fuel blending	6,000 gallons
Ink waste sludge	Class II dumpster, sent to Western Waste industries	76 tons
Scrap Metal	Roll-off container, sent off-site for recycling	100 tons
Construction debris	Sent to Western Waste Industries	25 tons
Spent carbon	Drum storage area, sent to Gibralter Chemical Resources for fuel blending	unknown
Solid oily waste	Satellite accumulation areas, sent to Western Waste Industries	unknown
Polybutene-contaminated water	Sent to Gibralter Chemical Resources for disposal	unknown
Absorbent Dry/Oil Filters	Sent to Gibralter Chemical Resources for fuel blending	unknown
Water from dewatered inks	Sent to the Temple Wastewater Treatment Plant	unknown
Aerosol paint containers	Sold to DLT Salvage for recycle	unknown
Empty drums	Sold to DLT Salvage for recycle	unknown

2.2.4 Identification of Solid Waste Management Units

As a result of this RCRA Facility Assessment, a total of 28 SWMUs have been identified at the Mobil Chemical Company facility. The definition of a SWMU adopted in this RFA reflects current EPA policy as stated in the July 15, 1985 Codification Rule (50 FR 28701), the RCRA Facility Assessment Guidance Document (October 1986), and other recent policy directives from the Office of Solid Waste and Emergency Response (OSWER). SWMUs are defined as any discernable waste management unit at a RCRA facility from which hazardous constituents might migrate. The definition does not include accidental spills from production areas and units in which wastes have not been managed (e.g., product storage areas). Table 2-2 presents a summary of the regulatory and operating status for all SWMUs identified at the facility.

Table 2-2

Solid Waste Management Units

Mobil Chemical Company
Temple, Texas

SWMU No.	Name of Solid Waste Management Unit	Regulatory Status	Operating Status
1	Underground Storage Tank System	RCRA-regulated	closed
2	Tray Cleaning and Rinse Stations	unregulated	active
3	ALAR System	unregulated	active
4	Mop-water Tank	unregulated	active
5	General Products Plant Nonhazardous Drum Storage Area	unregulated	active
6	Ink Waste Roll-off Container	unregulated	active
7	General Products Plant Scrap Metal Roll-off Container	unregulated	active
8	General Products Plant Trash Compactor/40-cubic yard Roll-off Container	unregulated	active
9	General Products Plant Safety Kleen Stations (6)	unregulated	active
10	General Products Plant Satellite Accumulation Areas (50)	unregulated	active
11	Sandblasting Unit	unregulated	active
12	Scrap Metal Collection Bin	unregulated	active
13	Waste Oil Management System	unregulated	active
14	Pellet Retention Screens	unregulated	active
15	Scrap Metal Storage Area	unregulated	active

SWMU No.	Name of Solid Waste Management Unit	Regulatory Status	Operating Status
16	Foam Plant Safety Kleen Stations (2)	unregulated	active
17	Foam Plant Satellite Accumulation Areas (20)	unregulated	active
18	Temporary Used Oil Accumulation Area	unregulated	active
19	Pentane Recovery System	unregulated	active
20	Hazardous Waste Accumulation Area	unregulated	active
21	Foam Plant Scrap Metal Roll-off Container	unregulated	active
22	Foam Plant Trash Compactor/40 Cubic Yard Roll-off Container	unregulated	active
23	Foam Plant General Refuse Roll-off Container	unregulated	active
24	Polystyrene Sludge Satellite Accumulation Area	unregulated	active
25	Foam Plant Nonhazardous Drum Storage Area	unregulated	active
26	Foam Plant Hazardous Waste Drum Storage Area	unregulated	active
27	Construction Debris Accumulation Area	unregulated	active
28	Foam Plant Air Abatement Units	unregulated	active

In addition to these SWMUs, the following area of concern was identified based on the VSI. Photographs of the area of concern are presented in Appendix A.

Areas of Concern

Number	Name	Regulatory Status	Operating Status
1	Isopentane Underground Storage Tank	unregulated	active

2.3 REGULATORY STATUS

This section summarizes the regulatory status of the Mobil Chemical Company facility. Information is presented on permits and other environmental compliance issues under both state and federal regulations.

2.3.1 Permits

Mobil Chemical Company submitted a RCRA Part A Hazardous Waste Permit Application on November 18, 1980 (Ref. 5). The facility was granted interim status in June 1981 pursuant to Section 3005 of RCRA. Interim status was granted for a 4,000 gallon underground hazardous waste storage tank that could not be cleaned or inspected in situ every 90 days to certify that it had been emptied.

This hazardous waste storage tank was closed in August 1991, in accordance with an approved Closure Plan (with amendments). (Ref. 3) The facility is still awaiting a certification letter from TWC. On September 27, 1991, Mobil Chemical Company filed a petition requesting that interim status for the facility be withdrawn because hazardous waste was no longer stored on-site for greater than 90 days. According to facility representatives, Mobil Chemical Company's interim status was withdrawn on December 11, 1991. (Ref. 3) Facility representatives did not provide documentation that the withdrawal of interim status had been granted by EPA.

The facility has two additional active state permits for air releases: one for its printing operations at the General Products plant and one for the Foam plant. All active permits are described in Table 2-3 below.

In addition, the facility has four state permit exemptions for various processes at its two plants. These exemptions are all active and have indefinite expiration dates:

- Extruders -- Exemption Number 10
- Resin Conveying -- Exemption Number 27
- Printing -- Exemption Number 13
- Bag Machine Conversion -- Exemption Number 106

2.3.2 Other Environmental Compliance Issues

Facility representatives were not aware of any public complaints made regarding operations at their facility. Several enforcement actions regarding operations at the facility have been taken by state, federal, and city agencies:

- In 1985, the Texas Air Control Board (TACB) cited the facility for excessive air emissions above permit limits. Mobil Chemical Company responded by installing a TACB-approved air abatement system to lower emissions in early 1986. No fines were issued for this violation. (Ref. 3, 8)

- EPA Region VI officials cited Mobil Chemical Company for failure to identify restricted wastes (n-butyl alcohol) and provide proper identification for such wastes in 1987. EPA dismissed the charges with prejudice when Mobil Chemical Company submitted a letter from the laboratory stating that the facility had never handled any n-butyl alcohol. (Ref. 3, 8)

Table 2-3

Summary of Permits

Mobil Chemical Company
Temple, Texas

Permit	Agency	Number	Exp. Date	Status
EPA I.D. #	USEPA	TXD052121 068	Indefinite	Active
Solid Waste Registration	TWC	32175	Indefinite	Active
Interim Status Part A	USEPA TWC	TXD 052121068	12/8/92 (withdrawn 12/11/91)	Withdrawn
General Products Plant Printing Department (Air)	TACB	C-20229	1995	Active
Polystyrene Foam Products Plant (Air)	TACB	R-3372	1995	Active

- On October 15, 1991, the TWC issued Mobil Chemical Company a Notice of Violation for Waste Registration. The TWC found that the underground storage tanks were still listed as active on the facility's registration. Facility representatives claim that the situation was corrected on November 7, 1991. (Ref. 3, 8)

- The City of Temple cited Mobil Chemical Company on March 19, 1991 for exceeding permitted levels of BOD. In response, Mobil Chemical Company performed their own tests, and facility representatives sent a letter to the TWC stating that they believed that the excess BOD was due to laboratory error. The facility sent a letter to this effect to the City and no further action was taken. (Ref. 3, 8)

- The City of Temple issued Mobil Chemical Company a Notice of Violation for Total Suspended Solids on September 16, 1991. The facility performed its own analysis and found that the TSS consisted mostly of toilet paper. Facility representatives stated that this was a one-time occurrence and has not occurred since. No fines were levied by the city for this violation. (Ref. 3, 8)

3.0 ENVIRONMENTAL SETTING

This section describes the environmental setting of the Mobil Chemical Company site and the water resources of the Temple, Texas area. The information provides a basis for evaluating potential impacts on human health and the environment from existing or potential releases of hazardous materials to the environment from the SWMUs identified at Mobil Chemical Company. The following subsections describe the land use, climate, topography and surface water, soils, geology, and ground water of the site.

3.1 LAND USE

Mobil Chemical Company is located on a 104 acre site in Temple, Texas. Facility representatives were unaware of land use at the site prior to its purchase by Mobil Chemical Company. The land to the east and southeast of the facility is primarily commercial and residential. To the south, the land is used for commercial purposes. Additional industrial land is located directly west of the facility, and ranch/farmland areas are located to the north. Off-site population is an estimated 5,000 within a 1 mile radius of the facility, and 25,000 within a 3 mile radius. There are no sensitive environments within 1 to 3 miles of the facility. Lake Belton is located approximately 7 miles to the west of the facility. (Ref. 6)

3.2 CLIMATE

The climate of Bell County is humid subtropical and is characterized by hot summers. The winters are generally mild, and cold spells are brief. The average maximum temperature of the area is 78.7 degrees fahrenheit. The relative humidity is generally uniform throughout the year, but varies during the day. The mean relative humidity is 83 percent at 6:00 a.m., 55 percent at noon, and 52 percent at 6 p.m. (Ref. 6)

Average annual precipitation is 33.8 inches, and is fairly evenly distributed throughout the year. May has the most precipitation, with an annual accumulation of 4.65 inches. July, with 1.96 inches of precipitation, has the least precipitation. No flooding occurs near plant site. (Ref. 6)

3.3 TOPOGRAPHY AND SURFACE WATER

The City of Temple's main source of drinking water is Lake Belton, located 7 miles to the west of the Mobil Chemical Company facility. The water from Lake Belton is treated in the Temple Water Treatment Plant prior to use. Surface water from Lake Belton also serves as the primary source of industrial water for the city. (Ref. 6)

Mobil Chemical Company is located approximately one-half mile to the east of Little Elm Creek, which is an intermittent stream. The facility is also located approximately 30 miles to the southwest from the Brazos River, which is used primarily for recreational purposes. (Ref. 6)

3.4 SOILS

The soils in the area of the facility consist of gently sloping soils on broad ridgetops and slopes. Surface soils consist of dark grayish-brown, calcareous silty clay approximately 16 inches in depth. Below this layer is a silty clay that measures approximately 24 inches. The silty clay is grayish-brown in the upper part of the layer and pale brown in the lower part of the layer. The layer below the silty clay consists of beds of chalk and marly clay. (Ref. 6)

Soil features that may affect urban development are: shrink-well potential, which can cause cracking and shifting of structures; corrosivity, resulting in deterioration of pipelines and steel in the ground; high pH values, which limit the types of ornamental shrubs, trees, and flowers that can be grown; and texture of the clay, which becomes sticky and plastic when wet. (Ref. 6)

3.5 GEOLOGY

Mobil Chemical Company's facility is located in Bell County Texas. The facility is situated on an outcrop of the Austin Chalk formation which is of upper Cretaceous age. The Austin Chalk in Bell County consists of predominantly white, slightly argillaceous, chalky, fairly soft limestone, with occasional inter-fingered softer chalky marls, and intermittent clay lenses. The Austin chalk sits stratigraphically on top of the Eagleford Shale Group. The Eagleford Shale serves as a barrier between the Austin Chalk and deeper water-bearing horizons. The Eagleford Shale Group sits unconformably on the Washita Group, which consists of limestones and shales. The limestones in this group usually yield small amounts of water but are not considered a viable producer. A shale barrier lies between this limestone and the much deeper water-bearing horizons. (Ref. 3)

3.6 GROUND WATER

The principle ground-water source for the Temple area is the Trinity Group aquifer. The Trinity Group aquifer is the primary waterwell source providing water to the surrounding area. This lower Cretaceous age strata consists of many water-bearing horizons but the principle source for this area is the Hosston member of the Travis Peak formation. (Ref. 3)

The Hosston unit is often referred to as the "lower Trinity Sand" or the "Second Trinity" by drillers and residents in the region. The Hosston is reached at variable depths in the Temple area, usually between 1,500 feet and 2,000 feet below the ground surface. Although there are similar isolated water tables at shallower depths, most are not fit for human consumption and it is therefore necessary to tap into the deeper water-producing horizon. (Ref. 3)

Faulting and jointing are commonplace in the Austin Chalk and although this formation is not considered a viable ground-water source, the fractures can provide unpredictable pathways for ground-water flow. The Mobil Chemical Company facility sits on a limestone unit which is not considered a viable source of drinking water. (Ref. 3)

The Texas Water Commission reports no wells within a one-half mile radius of the facility, and the only well reported within two miles of the area is a shallow well used for livestock feed water. This well is producing from a horizon deeper than the Austin Chalk. (Ref. 3)

4.0 SOLID WASTE MANAGEMENT UNITS

This section discusses the SWMUs at the Mobil Chemical Company facility and evaluates actual or potential releases from those units. ICF identified 28 SWMUs and 1 AOC during the PR and VSI. Appendix A provides photographs of the SWMUs and AOC, and Appendix B shows the location of the units and the area of concern. Unless otherwise referenced, data presented in this chapter were obtained during the VSI.

4.1 SWMU NO. 1 - UNDERGROUND STORAGE TANK SYSTEM (Photo 1)

Description

This unit is an Underground Hazardous Waste Storage Tank located south of the main sidewalk and east of the office area at the General Products plant. The unit consisted of a 4,000 gallon fiberglass tank that was coated with epoxy. It was positioned in the lower level of a limestone pit, and supported by a concrete slab. The pit also contained two 4,000 gallon product storage tanks. These tanks were also constructed of fiberglass and epoxy-coated. They were located on the upper tier of the limestone pit. All three tanks were situated in parallel series within the pit. The tanks were covered with pea gravel, and the ground surface of the tank area is covered with grass.

There is a network of french drains in the pit that serve to route rain water from the limestone pit to a sump which is connected to the city sewer. Overfills, tank leaks, and piping leaks are drained into the sump. If the sump's capacity is exceeded, spilled material, along with the ground water, is automatically pumped into the city sewer.

Status

This unit was at one time operated as a temporary storage unit (greater than 90 day) under a RCRA Interim Status Permit (#TXD052121068). Due to process changes at the facility (i.e., changing from solvent-based inks to water-based inks in the printing process), Mobil Chemical Company submitted a closure plan for the tank system to the TWC on October 24, 1990. The tank was closed according to an approved closure plan in July, 1991. At the time of the VSI conducted on January 6, 1992, facility representatives were awaiting receipt of a letter of final closure approval from the TWC. (Ref. 8)

Waste Type

The hazardous waste storage tank managed ink wastes and spent solvents (D001, D002, D007, D009, D006), ink pigments, and clean-up water from the General Products plant. The tank also stored waste VM&P Naphtha, isopropanol, N-propanol, ink pigments, and clean-up water from the printing operation. The tank received approximately 1,500 to 2,000 gallons of waste per month during its active life. (Ref. 3)

The two product storage tanks stored naphtha, n-propyl alcohol, and isopropyl alcohol. (Ref. 3)

Waste Management

Waste flowed by gravity through a 4 inch line into the hazardous waste storage tank from floor drains located in the Graphic Arts room of the General Products plant. Accumulated liquid waste was removed by vacuum truck at least once every 89 days or less. Residues at the bottom of the tank were not removed. Waste was initially disposed of in a fuel blending program. Prior to 1988, this waste was sent off-site to Malone Company, Texas City, Texas. After 1988, the waste was sent to Gibralter Chemical Resources in Winona, Texas. The facility discontinued the use of solvent-based inks in November 1989. (Ref. 1, 3, 8)

Environmental Releases

There have been two reported releases from the hazardous waste storage tank. On January 25, 1989, the hazardous waste storage tank overflowed during preparation for hydrostatic testing. According to facility representatives, the spill of approximately 2 to 5 gallons of waste was confined to a 2 foot diameter corrugated pipe filled with pea gravel. An analysis of the ground water in the sump indicated no contamination. According to facility representatives, the incident was not reported to the TWC or EPA at the time of the spill because the waste is not a listed waste. Releases of non-listed wastes need not be reported unless the quantity released exceeds 100 pounds. (Ref. 8)

The second release from the hazardous waste storage tank occurred sometime prior to 1978. Facility representatives were not aware of the specific date of the release. During monitoring performed as part of the tank removal, arsenic at concentrations of 0.94 to 3.0 ppm and total petroleum hydrocarbons (TPH) were found in the underground storage tank pit. Facility representatives did not know the concentrations of TPH found in the pit. According to facility representatives, the waste conveyance lines and tank tested tight. Facility representatives concluded that these contaminants originated in the old waste conveyance lines that had leaked into the limestone chase, and flow by gravity into the pit. The facility reported the findings to the TWC and, according to facility representatives, were told to remediate the area as part of closure. The final closure report states that this area was remediated during closure of the unit. (Ref. 4)

Remedial Action Taken

As part of final closure of the Underground Storage Tank System, the tanks were removed and the excavation site remediated. The side walls of the original tank excavation were cleaned with a high-pressure fire hose, the concrete slab system was removed, and the backfill soil that had been originally placed under the slab was removed. The entire tank excavation floor was cleaned with a fire hose, and the cleaning water disposed of off-site. The entire excavation was then backfilled with pea gravel. Soil borings made inside the original tank excavation area indicated that this area was free of any residual contamination. The final closure report concludes that there is very little possibility of any active past migration of contamination from the tank site into any aquifer. (Ref. 4)

In response to the January 25, 1989 spill, all contaminated pea gravel was vacuumed out of the 2 foot corrugated pipe, and manifested off-site as hazardous waste to Gibralter Chemical Resources.

In response to the 1978 spill, all loose materials and the concrete slab were removed from the limestone pit. Contaminated rock, concrete, soil, and pea gravel were analyzed and determined to be Class I nonhazardous material. This material was manifested for off-site disposal as Class I waste to Western Waste Industries. The limestone pit and limestone chase were steam-cleaned with high pressure fire hoses. According to facility representatives, the limestone pit, chase, and sump waters were pumped to the city sewer with the city's permission.

Suggested Action

ICF recommends that no RFI be conducted for this unit.

Reasons

The unit has been closed according to TWC standards, and all reported releases have been remediated. According to the final closure report, there is no evidence to suggest residual or potential future contamination from this unit.

4.2 SWMU NO. 2 - TRAY CLEANING AND RINSE STATIONS (Photos 2 and 3)

Description

This SWMU consists of a tray cleaning station and a rinse station. The units are situated adjacent to each other and are located in the Graphic Arts department of the General Products plant. Both units are positioned on the concrete floor. There is no secondary containment around the two units. No floor drains exist in this area of the plant.

The tray cleaning station has a capacity of 400 gallons. The unit is constructed of stainless steel and is closed-topped. The unit is approximately 10 feet in length, five feet high, and four feet wide. The rinse station is also constructed of stainless steel. It consists of a tank with two steel grates. The wastewater is collected at the bottom of the unit. Its approximate size is eight feet in length, five feet high, and five feet wide.

Status

The unit is not regulated under RCRA Subtitle C because it does not manage hazardous waste. The unit does, however, manage nonhazardous waste that is subject to RCRA Subtitle D regulation. Both units were installed in 1970 and are currently active.

Waste Type

These units manage water-based ink solids and wastewater generated from the cleaning of drip pans. The inks consist of various waxes, pigments, varnishes, and 0.016 to 0.6 percent ammonia. This waste is classified as Class I nonhazardous waste.

Waste Management

The Tray Cleaning Station receives ink trays stained with water-based inks used in the printing process in the General Products plant. The unit operates by agitating the trays in a soapy cleaning solution to loosen the ink. Once the ink is removed from the trays, they are taken to the Rinse Station where the trays are placed on drainage screen and sprayed with a hose.

The ink wastewater generated from both the Tray Cleaning and Rinse Stations is pumped to a 500-gallon holding tank, which is part of the ALAR System (SWMU 3), for dewatering and subsequent off-site disposal.

Environmental Releases

Facility representatives were not aware of any releases to any environmental media from this unit. During the VSI conducted on January 6, 1992, both units appeared to be well-maintained. There was no evidence of staining on the concrete floor surrounding the unit.

Remedial Action Taken

There has been no reported remedial action at this SWMU.

Suggested Action

ICF recommends that no RFI be conducted for this unit.

Reasons

These units do not manage waste which is toxic or hazardous. There is no evidence to suggest a past release from this unit, and it is well-maintained.

4.3 SWMU NO. 3 - ALAR SYSTEM (Photos 4 and 5)

Description

The ALAR system includes several units used to treat water-based inks and ink wastewater. The unit is located at the north side of the Graphic Arts department of the General Products plant. The entire system is situated on a concrete pad and is surrounded by a 3.5 inch steel berm. The berm is actually a steel plate with two raised portions separated by approximately two inches of space. The concrete pad measures approximately 20 feet in length and 10 feet wide. The entire unit is contained under a roof, and is surrounded by concrete walls on three sides. The ALAR system is comprised of several elements:

- 500-gallon Wastewater Holding Tank. The tank is constructed of steel, with approximate dimensions of 5 feet x 7 feet x 7 feet. A water pump is connected to the tank.
- 1000-gallon Mixing Tank. The tank is constructed of steel and is approximately 12 feet high with a diameter of 6 feet.
- Three 50-gallon holding tanks containing base solution, acid solution, and diatemaceous earth.
- A rotating steel drum.
- An activated carbon filter.
- An ink waste solids container.

Status

The unit is not regulated under RCRA Subtitle C because it does not manage hazardous waste. The unit does, however, manage nonhazardous waste that is subject to RCRA Subtitle D regulation. It was installed in 1991, and is currently active.

Waste Type

The unit manages water-based ink solids and ink wastewater. These wastes are classified as Class II nonhazardous.

Waste Management

The SWMU receives water-based ink solids and ink wastewater from the Graphic Arts department and from SWMU 2. The wastes are sent via pipeline to the 500-gallon holding tank. Here, the waste inks and ink wastewater are mixed with clean water. This diluted wastewater is then pumped, using the pump attached to the 500-gallon holding tank, to the adjacent 1000-gallon mixing tank. In this tank, the wastewater solution is mixed with a flocculent (from one of the three 50-gallon holding tanks) to lower the pH of the solution to approximately 3. Once the pH has been lowered sufficiently, the ink solids are chemically fixed. Next, lime (from one of the three 50-gallon holding tanks) is added to the solution to raise the pH to approximately 11. The wastewater is allowed to mix for approximately 15 minutes and during this time, the pH drops to approximately 9.5

The wastewater, including the ink solids, is vacuumed from the tank and mixed with diatemaceous earth (from the third of the 50-gallon holding tanks) then piped to a pan in which the rotating steel drum is positioned. The drum separates the water from the remaining ink by forming a filter cake of diatemaceous earth and ink solids around the drum. The solids are then scraped off the rotating drum and dropped into the ink waste container. These ink solids are then temporarily stored in a Class II 30 Cubic Yard Roll-Off Container (SWMU 4). This waste is later sent off-site to Western Waste Industries for disposal. The separated water is then passed through an activated carbon filter and vacuum pumped back to the system to keep the rotating drum cool during operation. The clean water is then pumped via pipeline to the Temple Water Treatment Plant.

Environmental Releases

Facility representatives were not aware of any releases to any environmental media from this unit. During the VSI conducted on January 6, 1992, the system components were well-maintained. There was no evidence of staining of the concrete containment area either on the pad or the berm. In addition, there was no evidence of staining outside the secondary containment area.

Remedial Action Taken

There has been no reported remedial action at this SWMU.

Suggested Action

ICF recommends that no RFI be conducted for this unit.

Reasons

The system does not handle waste which is toxic or hazardous. The unit is located within a concrete secondary containment area. There is no evidence to suggest a past release from this unit, and it is well-maintained. The wastewater is filtered before it is sent to the Temple Water Treatment Plant.

4.4 SWMU NO. 4 - MOP WATER TANK (Photo 6)

Description

This unit is a Mop Water Tank used to hold mop water generated by the clean-up of the Graphic Arts department's floors. The unit is located in the same containment area as the ALAR System (SWMU 3) at the north side of the General Products plant. The tank is constructed of stainless steel and is closed-topped. The approximate dimensions of the 50-gallon unit are 2 feet x 6 feet x 3 feet. There are no floor drains in this area.

During the VSI conducted on January 6, 1992, the tank and the concrete wall behind the tank were stained with waste ink residues. The concrete floor around the tank was also stained with waste ink.

Status

The unit is not regulated under RCRA Subtitle C because it does not manage hazardous waste. The unit does, however, manage nonhazardous waste that is subject to RCRA Subtitle D regulation. It was installed in 1991, and is currently active.

Waste Type

The unit manages water-based ink solids and wastewater. The waste is classified as Class I nonhazardous.

Waste Management

The unit receives waste from clean-up processes in the Graphic Arts department. The floors in the department are periodically mopped with water to remove any spilled ink generated during the printing process. The waste is poured into the unit from mop buckets. The wastewater is sent through the ALAR System (SWMU 3) for dewatering, and any ink solids are transferred to SWMU 6 for off-site disposal. The wastewater is filtered through the carbon filter associated with SWMU 3 and is discharged via pipeline to the Temple Water Treatment Plant.

Environmental Releases

Facility representatives were not aware of any releases to any environmental media from this unit. During the VSI conducted on January 6, 1992, the unit was well-maintained. The concrete floor and wall around the tank were stained with waste ink. Facility representatives stated that the stains occur during transfer of the wastewater from the mop buckets to the tank. All of the spilled waste would be contained in the bermed area and would be cleaned up immediately.

Remedial Action Taken

There has been no reported remedial action for this SWMU.

Suggested Action

ICF recommends that no RFI be conducted for this unit.

Reasons

The unit is closed-topped and located on a bermed concrete pad. It does not manage waste that is toxic or hazardous. The unit is managed on a concrete pad which is bermed.

4.5 SWMU NO. 5 - NONHAZARDOUS DRUM STORAGE AREA (Photo 7)

Description

SWMU 5 is the General Products plant Nonhazardous Drum Storage Area. The unit is located outside the Graphic Arts department on the north side of the General Products plant. The unit consists of a number of 55-gallon steel drums and one 340-gallon storage tank in a concrete containment area. The containment area was expanded in 1991. The concrete containment area is approximately 135 square feet and is surrounded by a 3.5 inch steel berm. The unit has a secondary containment capacity of 597 gallons. The entire containment area is covered with a corrugated tin roof and is surrounded on three sides by concrete walls.

The 340-gallon storage tank and the 55-gallon drums were placed directly on the concrete pad. The tank and all drums were closed-topped and were in good condition.

Status

The unit is not regulated under RCRA Subtitle C because it does not manage hazardous waste. The unit does, however, manage nonhazardous waste that is subject to RCRA Subtitle D regulation. The original container storage area was installed in 1981, and was later expanded to its current size in 1991. The unit is currently active.

Waste Type

The unit manages several wastes including:

- Water-contaminated polybutene (340 gallon tank);
- Spent carbon from the ALAR System carbon filter;

- Oil dry and oil filters, Class I or Class II nonhazardous solids (lab-tested to determine TPH, BTEX and total metals: analysis concluded that waste is acceptable for land disposal); and

- Empty steel drums, a Class II waste.

Waste Management

The unit receives waste from the various processes in the General Products plant:

- The water-contaminated polybutene is brought from the process in a small container and emptied into a 340-gallon tone tank. This waste is sent off-site for disposal by fuel blending at Gibralter Chemical Resources.

- Activated carbon, when spent, is removed from the ALAR carbon column and placed in 55-gallon drums. According to facility representatives, Mobil Chemical company has requested a waste code for this waste from the TWC.

- The oil dry and oil filters are collected in 55-gallon drums in various areas of the plant and moved to the storage area when full. This waste is sent off-site for disposal by fuel blending at Gibralter Chemical Resources.

- Empty steel drums are brought to the storage area when the contents are completely used. Non-returnable drums are rendered unusable by puncturing and then are placed in SWMU 7 for recycling at DLT Salvage. Returnable drums are returned to the vendor.

Environmental Releases

Facility representatives were not aware of any releases to any environmental media from this unit. During the VSI conducted on January 6, 1992, the storage area was well-maintained. There was no evidence of staining on the concrete floor or steel berm.

Remedial Action Taken

There has been no reported remedial action at this SWMU.

Suggested Action

ICF recommends that no RFI be conducted for this unit.

Reasons

The unit does not manage waste that is toxic or hazardous. The wastes are managed on a concrete pad surrounded by a steel berm. There is no evidence to suggest a past release from this unit, and it is well-maintained.

4.6 SWMU NO. 6 - INK WASTE ROLL-OFF CONTAINER (Photo 8)

Description

The Ink Waste Roll-Off Container is located outside the Graphic Arts department on the north side of the General Products plant. The unit consists of a 30-cubic yard steel container located within a concrete containment area. The unit is raised approximately 8 inches on wheels. The concrete pad is surrounded on three sides by a 4 inch cement curb. The container is an open-topped style dumpster, which is covered at all times with a vinyl cover.

Status

The unit is not regulated under RCRA Subtitle C because it does not manage hazardous waste. The unit does, however, manage nonhazardous waste that is subject to RCRA Subtitle D regulation. It was installed in 1991, and is currently active.

Waste Type

The unit manages dewatered ink solids, a Class II nonhazardous waste.

Waste Management

The unit receives waste from the Ink Waste Container component of the ALAR System (SWMU 3). Mobil Chemical Company has a contract with Western Waste Industries for pick up and off-site disposal of the wastes. The wastes are picked up when the dumpster is full, or every 45 days, whichever is earlier.

Environmental Releases

Facility representatives were not aware of any releases to any environmental media from this unit. During the VSI conducted on January 6, 1992, the unit appeared clean. There was no evidence of staining on the concrete pad, and the container was covered.

Remedial Action Taken

There has been no reported remedial action for this SWMU.

Suggested Action

ICF recommends that no RFI be conducted for this unit.

Reasons

The waste container is covered at all times, and is situated on a concrete pad surrounded on three sides by a 4 inch concrete curb. The unit manages waste that is not toxic or hazardous. There is no evidence to suggest a past release from this unit, and it is well-maintained.

4.7 SWMU NO. 7 - GENERAL PRODUCTS PLANT SCRAP METAL ROLL-OFF CONTAINER (Photo 9)

Description

This unit consists of a 20-cubic yard roll-off situated on a concrete pad. The unit is located north of the General Products plant, just outside the Graphic Arts department. The container is constructed of steel and is covered at all times with a vinyl tarp. The concrete pad is not bermed and is adjacent to a grassy area.

Status

The unit is not regulated under RCRA Subtitle C because it does not manage hazardous waste. The unit does, however, manage nonhazardous waste that is subject to RCRA Subtitle D regulation. It was installed in 1991, and is currently active.

Waste Type

The unit manages Class II scrap metal from the General Products plant maintenance department (aerosol cans, motors), and empty steel drums. The unit contains such materials as brass, aluminum, stainless steel, and iron.

Waste Management

The container receives scrap metal and cans which have been rendered unusable by the maintenance department. The unit also receives waste from SWMU 11 (Sandblasting Unit) and SWMU 15 (Scrap Metal Storage Area). When the container is full, the scrap metal is sold to DLT Salvage for recycle.

Environmental Releases

Facility representatives were not aware of any releases to any environmental media from this unit. During the VSI conducted on January 6, 1992, the unit was well-maintained. A small amount of rust staining was present on the pad. Facility representatives noted that the rust was most likely from the outside of the container due to high levels of rain in recent weeks.

Remedial Action Taken

There has been no reported remedial action for this SWMU.

Suggested Action

ICF recommends that no RFI be conducted for this unit.

Reasons

The unit is covered at all times and is positioned on a concrete pad. It manages waste that is not toxic or hazardous. There is no evidence to suggest a past release from this unit, and it is well-maintained.

4.8 SWMU NO. 8 - GENERAL PRODUCTS PLANT TRASH COMPACTOR/40-CUBIC YARD ROLL-OFF CONTAINER (Photos 10 and 11)

Description

This unit consists of a trash compactor and a 40-cubic yard roll-off container, located at the south end of the General Products plant between the stretch film manufacturing and scrap film storage buildings. The trash compactor is a Tri-pak model TP-55, constructed of steel. It is adjacent to the 40-cubic yard roll-off container, which is positioned on a concrete pad. The roll-off container is constructed of steel and is closed-topped. The concrete pad is not bermed.

Status

The unit is not regulated under RCRA Subtitle C because it does not manage hazardous waste. The unit does, however, manage nonhazardous waste that is subject to RCRA Subtitle D regulation. It was installed in 1970, and is currently active.

Waste Type

The unit manages nonhazardous general plant refuse consisting of floor sweepings, cardboard, paper, wood, plastic, metal, and cafeteria food scraps.

Waste Management

The unit receives waste from the General Products plant. Employees place refuse in roll carts throughout the plant. When the roll carts are full, they are dumped into the trash compactor, which compacts the debris and dumps the waste into the roll-off container. The roll-off container is picked up by BFI twice a week for disposal at the Temple City landfill. The trash compactor handles an annual waste volume of 300 tons. The grounds contractor inspects the compactor area weekly for trash that has spilled out of the compactor.

Environmental Releases

Facility representatives were not aware of any releases to any environmental media from this unit. During the VSI conducted on January 6, 1992, the area inside and outside the trash compactor was well-maintained. There was no evidence of staining on the concrete pad under the roll-off container.

Remedial Action Taken

There has been no reported remedial action for this SWMU.

Suggested Action

ICF recommends that no RFI be conducted for this unit.

Reasons

These units do not manage waste which is toxic or hazardous. There is no evidence to suggest a past release from this unit, and it is well-maintained. The roll-off container is closed-topped and is located on a concrete pad.

4.9 SWMU NO. 9 - GENERAL PRODUCTS PLANT SAFETY KLEEN STATIONS (Photos 12 and 13)

Description

This unit consists of six parts-cleaning stations located throughout the General Products plant. Each station is comprised of a metal sink measuring approximately 14 inches wide, 30 inches long, and six inches deep, with a hinged metal lid. The sink is positioned on either a 30-gallon or 60-gallon drum, used as a tank for the cleaning fluid, over the cement floor in the enclosed plant area.

Status

The unit is not regulated under RCRA Subtitle C because it does not manage hazardous waste. The unit does, however, manage nonhazardous waste that is subject to RCRA Subtitle D regulation. It was installed in 1980, and is currently active.

Waste Type

The unit manages petroleum naphtha (mineral spirits) (D001) that becomes contaminated with continued use and must be periodically replaced.

Waste Management

The contaminated petroleum naphtha is drained from the unit by Safety Kleen Corporation. The solvent is rented from Safety Kleen, and is in use until picked up by the company for recycle. The waste solvent in the 30-gallon stations are exchanged monthly, and the waste solvent in the 60-gallon stations are exchanged bi-weekly.

Environmental Releases

Facility representatives were not aware of any releases to any environmental media from this unit. During the VSI conducted on January 6, 1992, the outside of the unit was well-maintained. There was no evidence of staining on the concrete pad under the unit, and it was covered.

Remedial Action Taken

There has been no reported remedial action at this SWMU.

Suggested Action

ICF recommends that no RFI be conducted for this unit.

Reasons

The wastes are contained inside the metal sink and the unit is positioned on a cement pad. The unit is covered at all times when not in use. There is no evidence to suggest a past release from this SWMU, and it is well maintained.

4.10 SWMU NO. 10 - GENERAL PRODUCTS PLANT SATELLITE ACCUMULATION AREAS (Photos 14 through 16)

Description

This unit consists of 50 satellite accumulation areas located throughout the General Products plant. Each steel container has a 5-gallon capacity. There are three styles of containers used at the plant. Containers for aerosol cans are triangular and red, whereas the containers for oily rags are circular and either red or yellow. All containers are covered with a hinged lid, which is kept closed except when waste is being disposed of in the unit. The containers are all positioned on cement pads.

Status

The unit is not regulated under RCRA Subtitle C because it does not manage hazardous waste. The unit does, however, manage nonhazardous waste that is subject to RCRA Subtitle D regulation. It was installed prior to 1979 and is currently active.

Waste Type

The unit manages rags contaminated with gearbox and hydraulic oils and empty aerosol cans.

Waste Management

The oil rag containers receive contaminated rags used in cleaning machinery, maintenance areas, and other oily surfaces. These oily rags picked up every week by Dickies Corporation and are laundered off-site and reused.

The aerosol can containers receive empty cans from the maintenance department. When the container is full, the waste is sent to SWMU 7 for sale to DLT Salvage for recycle.

Environmental Releases

Facility representatives were not aware of any releases to any environmental media from this unit. During the VSI conducted on January 6, 1992, the unit was well-maintained. There was no evidence of staining on the concrete pads under the containers, and the containers were covered.

Remedial Action Taken

There has been no reported remedial action for this SWMU.

Suggested Action

ICF recommends that no RFI be conducted for this unit.

Reasons

The unit is covered at all times and is located on concrete pads. The waste managed is not toxic or hazardous. There is no evidence to suggest a past release from this unit, and it was well-maintained.

4.11 SWMU NO. 11 - SANDBLASTING UNIT (Photo 17)

Description

This unit consists of a sandblasting system positioned on a cement pad. The unit is located in the maintenance shop area of the General Products plant. The sandblasting system measures approximately 4 feet in length, 3 feet wide, and 5 feet high. The system is constructed of steel and glass. The glass window on the unit is used for observation during the sandblasting process. Rubber gloves are attached to the unit for handling the material during sandblasting. The system is enclosed on three sides when not in operation, and is completely enclosed during the sandblasting process. During the VSI conducted on January 6, 1992, a dusting of waste from the process covered approximately 95 percent of the floor under the unit.

Status

The unit is not regulated under RCRA Subtitle C because it does not manage hazardous waste. The unit does, however, manage nonhazardous waste that is subject to RCRA Subtitle D regulation. It was installed in 1981, and is currently active.

Waste Type

The unit manages a metal rust and sand mixture.

Waste Management

The unit receives corroded parts from the machine shop. The parts are placed inside the unit and corrosion is removed using a very fine-grained sand that is forced under high pressure into the system. The waste from this unit is sent to SWMU 7 for disposal. The sand is rarely changed. Facility representatives approximated that the sand is replaced once every five years.

Environmental Releases

Facility representatives were not aware of any releases to any environmental media from this unit.

Remedial Action Taken

There has been no reported remedial action for this SWMU.

Suggested Action

ICF recommends that sampling, possibly followed by an RFI, be conducted to verify the hazardous or nonhazardous nature of the dust on the concrete pad identified during the VSI conducted on January 6, 1992.

Reasons

At the time of the VSI conducted on January 6, 1992, approximately 95 percent of the floor surrounding the sandblasting system was covered with waste material from the system. Because of the nature of the operation (high pressure sandblasting of metal parts), inhalation of this particulate matter may pose a potential threat to human health if the material is determined to be hazardous.

4.12 SWMU NO. 12 - SCRAP METAL COLLECTION BIN (Photo 18)

Description

The Scrap Metal Collection Bin is located in the shift maintenance area of the General Products plant. The unit consists of an open-top, steel, 55-gallon drum positioned on a wooden platform. The platform rests on a cement pad.

Status

The unit is not regulated under RCRA Subtitle C because it does not manage hazardous waste. The unit does, however, manage nonhazardous waste that is subject to RCRA Subtitle D regulation. It was installed prior to 1979 and is currently active.

Waste Type

This unit manages scrap metal generated during welding operations.

Waste Management

The unit receives scrap metal waste from the shift maintenance department. When the container is full, it is taken to SWMU 7 where it is sold to DLT Salvage for recycle.

Environmental Releases

Facility representatives were not aware of any releases to any environmental media from this unit. During the VSI conducted on January 6, 1992, the unit was well-maintained.

Remedial Action Taken

There has been no reported remedial action for this SWMU.

Suggested Action

ICF recommends that no RFI be conducted for this unit.

Reasons

The unit is located on a wooden platform which is positioned on a concrete pad. It manages waste that has not come in contact with any hazardous chemicals. There is no evidence to suggest a past release from this unit, and it is well-maintained.

4.13 SWMU NO. 13 - WASTE OIL MANAGEMENT SYSTEM (Photos 19 through 23)

Description

The Waste Oil Management System is located inside between the general manufacturing building and the General Products building. The unit is comprised of several components:

- An aluminum funnel drain is located outside the room containing the oil storage tank. The funnel is approximately 1 foot in diameter and 1 foot high, and is attached to a concrete wall. The funnel connects to a pipe (approximately 2 inches in diameter) which leads into the waste oil tank room. An aluminum drip pan is positioned on the concrete floor directly below the funnel. The pan is approximately 16 inches long by 14 inches wide and 3 inches high.

- Inside the tank room is a 2,700-gallon above-ground waste oil tank constructed of 0.25 inch carbon steel. Two different pipelines are connected to the tank. One pipe directs the waste oil from the funnel into the tank, and the other, which is located at the bottom of the tank, directs the waste oil outside to the tank truck hook-up. The tank is positioned on a concrete pad. The room is constructed completely of concrete and one side of the room, where the door is located is a 4 inch concrete berm. The dimensions of the room are 20.5 feet by 20.25 feet by 2 feet. The containment area has a secondary containment capacity of 2,947 gallons. The tank room also stores 55-gallon drums of hydraulic oil in one corner of this area. A storm drain leading to the city sewer is also located in the tank room. The drain is completely surrounded by an 18 inch high concrete berm.

- A tank truck hook-up which is connected to the 2,700-gallon waste oil tank is located directly outside the tank room. The hook-up is connected directly to the wall of the building. A 5-gallon bucket hangs from the hook-up to catch any drips should the hook-up leak. The area surrounding the tank hook-up is covered with gravel.

Status

The unit is not RCRA-regulated since the waste oil is shipped off-site and recycled as fuel (40 CFR 266.40). The concrete tank room was originally installed in 1980 and was used for the storage of drummed waste oil. The Waste Oil Management System was installed in 1986 and is currently active.

Waste Type

The unit manages gearbox and hydraulic oils/grease.

Waste Management

The 2,700-gallon tank receives waste oil from the General Products plant maintenance operations. Employees pour the waste oil into the funnel which leads to the 2,700-gallon tank. The tank is emptied by vacuum truck using the tank hook-up. The waste is taken off-site by Gibralter Chemical Resources for fuel blending. The facility generates approximately 3,000 gallons of waste oil per year, which is stored in the tank. The tank is emptied once per year.

Environmental Releases

Facility representatives were not aware of any releases to any environmental media from this unit. During the VSI conducted on January 6, 1992, the entire unit was well-maintained. There was no evidence of staining of the aluminum drip pan or the concrete pad. There was no evidence of staining of the concrete containment area inside the tank room, or on the gravel around the truck hook-up.

Remedial Action Taken

There has been no reported remedial action for this SWMU.

Suggested Action

ICF recommends that no RFI be conducted for this unit.

Reasons

The system, with the exception of the tank hook-up is located within a building and is bermed. The tank hook-up has a secondary containment system that is designed to catch any drips and any spillage during transfer of the waste oil to the tank truck. The waste is not toxic or hazardous and it meets the exclusion for recycling. There is no evidence to suggest a past release from this unit, and it is well-maintained.

4.14 SWMU NO. 14 - PELLET RETENTION SCREENS (Photos 24 through 29)

Description

There are five Pellet Retention Screen units located around the General Products and Foam plants; at the southeast, southwest, and west stormwater outfalls; and at the west end of the polystyrene silo area. The screens are constructed of stainless steel.

The three screen units at the stormwater outfall locations are positioned at the beginning of a concrete culvert. The culvert is surrounded on two sides by a 5 foot concrete wall. This wall acts to direct stormwater run-off into the stormwater ditch. Each culvert contains a series of both horizontal and vertical screens designed to capture all debris.

There is also a small unit located next to the unit at the west stormwater outfall. The unit is approximately 3 feet by 3 feet and is positioned flush with the ground surface. The Pellet Retention Screen unit located in the polystyrene silo area is actually a series of two individual screens that are positioned on the surface of a concrete pad. The concrete pad is bermed to contain any spillage from the polystyrene storage silos. The screens measure approximately 2 feet by 3 feet and are flush with the concrete pad.

Status

The unit is not regulated under RCRA Subtitle C because it does not manage hazardous waste. The unit does, however, manage nonhazardous waste that is subject to RCRA Subtitle D regulation. All units are currently active. The screen units located at the southeast and southwest stormwater outfalls were installed in 1980. The screen at the polystyrene silo area has been operational since 1985. The screens located at the west stormwater outfall have been operational since 1991.

Waste Type

The units manage Class II and Class III stormwater run-off debris from both plants. This includes polystyrene and polyethylene resin pellets, polystyrene foam fluff, grass clippings, dirt/gravel, paper, and plastic.

Waste Management

The units receive debris-contaminated run-off during storm activity from all areas of the plants. The run-off is diverted to the culvert system where the debris is captured by the screens. The stormwater then drains into a ditch that leads off-site to a city storm drain. The screens located in the polystyrene storage silo area receive stormwater run-off that accumulates in the bermed area and the screens act to capture any debris in the water. All screens are cleaned by an outside contractor each time it rains, or monthly, whichever comes first. The resin pellets are placed in gaylord boxes and shipped off-site to Sabine Plastics for recycle.

Environmental Releases

The screens were designed to remove all visible evidence of resin pellets. Facility representative report that there have been no releases of resin pellets beyond the screens. During the VSI conducted on January 6, 1992, all units and the surrounding area, including the ditches, appeared to be free of resin pellets. All units were well-maintained.

Remedial Action Taken

There has been no reported remedial action for this SWMU.

Suggested Action

ICF recommends that no RFI be conducted for this SWMU.

Reasons

The units are designed to remove all debris before stormwater reaches the ditch. There is no evidence to suggest a past release from this SWMU, and it is well-maintained.

4.15 SWMU NO. 15 - SCRAP METAL STORAGE AREA (Photo 30)

Description

The Scrap Metal Storage Area consists of an asphalt and gravel pad located outside the south side of the General Products plant. The unit also contains a number of wooden pallets and metal racks used for storage. The area is approximately 150 feet by 25 feet. There is no berm surrounding the unit. The unit is surrounded on three sides by grass.

Status

The unit is not regulated under RCRA Subtitle C because it does not manage hazardous waste. The unit does, however, manage nonhazardous waste that is subject to RCRA Subtitle D regulation. It was installed in 1991, and is currently active.

Waste Type

The unit manages scrap metal left over from construction of various structures. The scrap metal is not from the removal of process equipment or waste handling equipment.

Waste Management

The unit manages scrap metal generated during construction activities. An outside contractor established the area while conducting on-site plant renovations. The scrap metal is taken to SWMU 7 and is then sold to DLT Salvage for recycling. Once construction activities are completed, all remaining scrap will be sent to SWMU 7 for disposal. The unit will then be decommissioned.

During the VSI conducted January 6, 1992, scrap metal was stored directly on the asphalt pad, on the wooden pallets, and on the metal racks.

Environmental Releases

Facility representatives were not aware of any releases to any environmental media from this unit. During the VSI conducted on January 6, 1992, the unit appeared to be well-managed. There was no evidence of staining on the asphalt.

Remedial Action Taken

There has been no reported remedial action at this SWMU.

Suggested Action

ICF recommends that no RFI be conducted for this unit.

Reasons

The SWMU manages waste which is not hazardous or toxic. It is managed on an asphalt pad. There is no evidence to suggest contamination of the area from this unit.

4.16 SWMU NO. 16 - FOAM PLANT SAFETY KLEEN STATIONS (Photos 12 and 13)

Description

This unit consists of two parts-cleaning stations located inside the Foam plant. Each station is comprised of a metal sink measuring approximately 14 inches wide, 30 inches long, and six inches deep, with a hinged metal lid. The sink is positioned over a 30-gallon drum, used as a tank for the cleaning fluid, over the cement floor in the enclosed plant area.

Status

The unit is not regulated under RCRA Subtitle C because it does not manage hazardous waste. The unit does, however, manage nonhazardous waste that is subject to RCRA Subtitle D regulation. It was installed in 1980, and is currently active.

Waste Type

The unit manages petroleum naphtha (mineral spirits) (D001) that becomes contaminated with continued use and must be periodically replaced.

Waste Management

The contaminated petroleum naphtha is drained from the units by Safety Kleen Corporation. The solvent is rented from Safety Kleen, and is in use until picked up by the company for recycle. The waste solvent is exchanged monthly.

Environmental Releases

Facility representatives were not aware of any releases to any environmental media from this unit. During the VSI conducted on January 6, 1992, the outside of the unit was well-maintained. There was no evidence of staining on the concrete pad under the unit, and both stations were covered.

Remedial Action Taken

There has been no reported remedial action at this SWMU.

Suggested Action

ICF recommends that no RFI be conducted for this unit.

Reasons

The wastes are contained inside the metal sink and the unit is positioned on a cement pad. The unit is covered at all times when not in use. There is no evidence to suggest a past release from this SWMU, and it is well-maintained.

4.17 SWMU NO. 17 - FOAM PLANT SATELLITE ACCUMULATION AREAS (Photo 14 through 16)

Description

This unit consists of 20 satellite accumulation areas located throughout the Foam plant. Each steel container has a 5-gallon capacity. There are three styles of containers used at the plant. Containers for aerosol cans are triangular and red, whereas the containers for oily rags are circular and either red or yellow. All containers are covered with a hinged lid, which is kept closed except when waste is being disposed of in the unit. The containers are all positioned on cement pads.

Status

The unit is not regulated under RCRA Subtitle C because it does not manage hazardous waste. The unit does, however, manage nonhazardous waste that is subject to RCRA Subtitle D regulation. It was installed prior to 1979 and is currently active.

Waste Type

The unit manages rags contaminated with gearbox and hydraulic oils and empty aerosol cans.

Waste Management

The oil rag containers receive contaminated rags used in cleaning machinery, maintenance areas, and other oily surfaces. These oily rags are picked up weekly by Dickies Corporation and are laundered off-site and reused.

The aerosol can containers receive empty cans from the maintenance department. When the container is full, the waste is sent to SWMU 7 for sale to DLT Salvage for recycle.

Environmental Releases

Facility representatives were not aware of any releases to any environmental media from this unit. During the VSI conducted on January 6, 1992, the unit was well-maintained. There was no evidence of staining on the concrete pads under the areas, and each container was covered.

Remedial Action Taken

There has been no reported remedial action for this SWMU.

Suggested Action

ICF recommends that no RFI be conducted for this unit.

Reasons

The unit is covered at all times and located on concrete pads. The waste managed is not toxic or hazardous. There is no evidence to suggest a past release from this unit, and it was well-maintained.

4.18 SWMU NO. 18 - TEMPORARY USED OIL ACCUMULATION AREA (Photo 31)

Description

This unit is located in the maintenance area of the Foam plant. It consists of a steel collection pan positioned on top of a 15-gallon steel drum. The pan and drum are positioned on a concrete pad that is not bermed. The pan is approximately 2 feet by 2 feet and is sloped toward a hole in the center. The pan has a 3 inch steel berm around three sides. The side that is not bermed is against a concrete wall. There are no floor drains in the vicinity of the unit.

Status

The unit is not regulated under RCRA Subtitle C because it does not manage hazardous waste. The unit does, however, manage nonhazardous waste that is subject to RCRA Subtitle D regulation. It was installed in 1976, and is currently active.

Waste Type

The unit manages waste oil generated by changing gear boxes.

Waste Management

The unit receives waste oil from maintenance operations in the Foam plant. Employees empty waste oil into the collection pan which funnels the waste into the drum. When the drum is full (approximately every 45 to 60 days), the waste is transferred to SWMU 20 and ultimately sent to Gibralter Chemical Resources for fuel blending.

Environmental Releases

Facility representatives were not aware of any releases to any environmental media from the unit. During the VSI conducted on January 6, 1992, the unit was well-maintained. There was no evidence of staining on the concrete floor surrounding the unit.

Remedial Action Taken

There has been no reported remedial action at this SWMU.

Suggested Action

ICF recommends that no RFI be conducted for this unit.

Reasons

The drum and collection pan are inside the Foam plant and positioned on a concrete floor. There is no evidence to suggest a past release from this unit, and it is well-maintained.

4.19 SWMU NO. 19 - PENTANE RECOVERY SYSTEM (Photos 32 through 34)

Description

There are three Pentane Condenser Recovery Units located in the reclaim room of the Foam plant. Each unit is contained in a steel cabinet with approximate dimensions of 8 feet by 4 feet by 3 feet. The door on the front of the cabinet has two windows for viewing the reclaim process. The units are managed on a concrete pad which is not bermed.

Next to each unit is a knock-out pot system used to contain the condensed wastewater. The knock-out pots consist of a condensate tank connected at the bottom to an 8 inch drainage pipe. Buckets are normally positioned under each of the pipes to collect any wastewater that may drip through the pipe. At the time of the VSI conducted January 6, 1992, one of the three knock-out pot systems did not have a bucket under the drain pipe. This pipe is positioned directly over a drain which leads to the city sewer.

Status

The units are not RCRA-regulated since they are not subject to the design and operating standards in 40 CFR Part 264 Subpart J. They were installed in 1986, and are currently active.

Waste Type

The units manage polystyrene foam scrap for pentane extraction and recycling. Hazardous waste (F005 and D001) is generated during the pentane recovery process and during routine cleanup of the units.

Waste Management

The three units receive polystyrene fluff generated during the manufacturing process. Excess foam scrap is pulverized into fluff. The fluff is then air conveyed to an extruder where air is squeezed out of the material and the material is then melted.

As the material melts, pentane gas is released. This gas is then cooled using chill water in a closed loop heat exchanger system. The knock-out pots adjacent to the units are used as a pre-condenser to capture the wastewater prior to its going to the condenser. When the knock-out pot is full, a valve is released to allow the liquid to flow down a pipe and into a bucket. This wastewater is then taken to SWMU 20. As the gas cools, the pentane is condensed into a liquid composed of water and pentane. This liquid is sent to an air bubbler where the water and pentane are separated.

The wastewater is sent to the Hazardous Waste Accumulation Area (SWMU 20) via three rubber hoses (one for each unit). The pentane goes to the front end of the process for reuse. The three units generate 340 gallons of waste every 45 days. The Pentane Recovery System processes approximately 8 gallons of pentane per hour.

The Pentane Recovery System is periodically cleaned using a solvent mixture containing methyl ethyl ketone, toluene, and xylene. The spent solvent is also sent to SWMU 20 for disposal.

Environmental Releases

Facility representatives were not aware of any releases to any environmental media from this unit. During the VSI conducted on January 6, 1992, ICF noted that one of the pipes leading from the knock-out pot was leaking wastewater into a drain directly underneath the pipe. The concrete pad underneath the pipe was also stained with the same material. Facility representatives stated that the drain is connected to the city sewer. The inside of the drain appeared to be severely stained. Facility representatives stated that the leak occurred due to a faulty valve on the knock-out pot system.

Remedial Action Taken

There has been no reported remedial action at this SWMU.

Suggested Action

ICF recommends that the facility replace the faulty valve to prevent any further release of waste into the city sewer drain.

Reasons

The leakage of wastewater from this unit into the city sewer may pose a threat to human health and the environment because the wastes managed in this unit are hazardous. At the time of the VSI, conducted on January 6, 1992, the wastewater was dripping onto the concrete pad and into the drain.

4.20 SWMU NO. 20 - HAZARDOUS WASTE ACCUMULATION AREA (Photos 35 and 36)

Description

This unit is a hazardous waste accumulation area, located outside the Foam plant at the north side of the pentane recovery room. The unit consists of a 340-gallon above-ground tank managed inside a bermed secondary containment concrete pad. The tank is constructed of steel and is closed-topped. The entire area is covered with a corrugated tin roof. There is no fence around the unit. At the time of the VSI, conducted on January 6, 1992, the tank was filled to capacity, and awaiting off-site disposal. The facility is utilizing a 55-gallon drum for hazardous waste storage in the interim until the hazardous waste tank is emptied. This 55-gallon closed-topped drum was located inside the secondary containment area. The drum was connected to three hoses that pumped the hazardous waste into the drum.

The secondary containment pad is approximately 8 feet by 8 feet. It is constructed of concrete with a 6 inch concrete berm surrounding the entire pad. The pad also has two small concrete ramps used for unloading and loading the hazardous waste tank from the containment structure. The pad has no drain, and has a secondary containment capacity of approximately 297 gallons.

Status

The unit stores waste for less than 90 days. Therefore, it is not subject to RCRA permit or interim status requirements, but must be operated in accordance with 40 CFR 262.34. The unit was installed on October 28, 1991, and is currently active.

Waste Type

The unit manages polystyrene sludge and spent solvents (F005, D001). The waste is a combination of one percent styrene sludge, two percent other organics, and 97 percent water.

Waste Management

The unit receives wastes via pipeline from the three Pentane Recovery System units (SWMU 19) and from SWMU 24 (Polystyrene Sludge Satellite Accumulation Area). Accumulated waste is picked up by Gibralter Chemical Resources for off-site transport to Gibralter's fuel blending facility.

Environmental Releases

Facility representatives were not aware of any releases to any environmental media from this unit. During the VSI conducted on January 6, 1992, the outside of the tank appeared clean. There was no evidence of staining in the concrete containment area either on the pad or on the berm. In addition, there was no evidence of staining outside the secondary containment area.

Remedial Action Taken

There has been no reported remedial action at this SWMU.

Suggested Action

ICF recommends that no RFI be conducted for this unit.

Reasons

This unit is a closed-topped tank located inside a concrete secondary containment pad. There is no evidence to suggest a past release from this unit, and it is well-maintained.

4.21 SWMU NO. 21 - FOAM PLANT SCRAP METAL ROLL-OFF CONTAINER (Photo 37)

Description

This unit is located between the foam manufacturing building and the old roll storage building. The container has a capacity of 20-cubic yards. It is open-topped and constructed of steel. The container is covered at all times with a vinyl tarp. It is positioned on a concrete pad which is not bermed.

Status

The unit is not regulated under RCRA Subtitle C because it does not manage hazardous waste. The unit does, however, manage nonhazardous waste that is subject to RCRA Subtitle D regulation. It was installed in 1991, and is currently active.

Waste Type

The unit manages scrap metal from the Foam plant maintenance department (aerosol cans, motors), empty steel product drums, and other miscellaneous scrap metal. Wastes contained in the unit at the time of the VSI conducted on January 6, 1992 included brass, aluminum, stainless steel, and iron.

Waste Management

The unit receives scrap metal and empty aerosol cans which have been rendered unusable by the Foam plant maintenance department. When the unit is full, the scrap metal is sold to DLT Salvage for recycle.

Environmental Releases

Facility representatives were not aware of any releases to any environmental media from this unit. During the VSI conducted on January 6, 1992, the outside of the container was well-maintained. There was no evidence of staining on the concrete pad.

Remedial Action Taken

There has been no reported remedial action at this SWMU.

Suggested Action

ICF recommends that no RFI be conducted for this unit.

Reasons

The container is covered at all times and is positioned on a concrete pad. The unit does not manage waste that is toxic or hazardous. There is no evidence to suggest a past release from this unit, and it is well-maintained.

4.22 SWMU NO. 22 - FOAM PLANT TRASH COMPACTOR/40 CUBIC YARD ROLL-OFF CONTAINER (Photos 38 and 39)

Description

This unit consists of a trash compactor and a 40-cubic yard roll-off container, located between the Foam plant and the old roll storage building. The trash compactor is a Bee compactor model 60-72, constructed of steel. It is adjacent to the 40-cubic yard roll-off container, which is positioned on a concrete pad. The roll-off container is constructed of steel and is closed-topped. The concrete pad is not bermed.

Status

The unit is not regulated under RCRA Subtitle C because it does not manage hazardous waste. The unit does, however, manage nonhazardous waste that is subject to RCRA Subtitle D regulation. It was installed in 1976, and is currently active.

Waste Type

The unit manages nonhazardous general plant refuse consisting of floor sweepings, cardboard, paper, wood, plastic, metal, and cafeteria food scraps.

Waste Management

The unit receives waste from the Foam plant. Employees place plant refuse in roll carts throughout the plant. When the roll carts are full, they are dumped into the trash compactor, which compacts the debris and dumps the waste into the roll-off container. The roll-off container is picked up by BFI twice weekly for disposal at the Temple City landfill. The trash compactor handles an annual waste volume of 275 tons. The grounds contractor inspects the area weekly for trash that has spilled out of the compactor.

Environmental Releases

Facility representatives were not aware of any releases to any environmental media from this unit. During the VSI conducted on January 6, 1992, the area inside and outside the trash compactor was well-maintained. There was no evidence of staining on the concrete pad under the roll-off container.

Remedial Action Taken

There has been no reported remedial action at this SWMU.

Suggested Action

ICF suggests that no RFI be conducted at this time for this unit.

Reasons

The unit does not manage waste which is toxic or hazardous. There is no evidence to suggest a past release from this unit, and it is well-maintained.

4.23 SWMU NO. 23 - FOAM PLANT GENERAL REFUSE ROLL-OFF CONTAINER (Photo 40)

Description

The unit consists of a 40-cubic yard roll-off container positioned on a packed soil/gravel surface. The unit is located between the Foam plant and the old roll storage building. The container is constructed of steel and is open-topped. There is no secondary containment structure for this unit.

Status

The unit is not regulated under RCRA Subtitle C because it does not manage hazardous waste. The unit does, however, manage nonhazardous waste that is subject to RCRA Subtitle D regulation. It began operation in 1986 and is currently active.

Waste Type

The unit nonhazardous manages scrap wood, cardboard, plastic and concrete.

Waste Management

The unit receives scrap materials from the Foam plant. Scrap is placed in the container daily. The container is picked up when full (approximately once per month) and shipped off-site by BFI for disposal at the City of Temple sanitary landfill. The unit manages approximately 12 tons of waste per year.

Environmental Releases

Facility representatives were not aware of any releases to any environmental media from this unit. During the VSI conducted on January 6, 1992, the unit was well-maintained. There was no evidence of staining on the ground surface under the roll-off container.

Remedial Action Taken

There has been no reported remedial action at this SWMU.

Suggested Action

ICF suggests that no RFI be conducted at this time for this unit.

Reasons

The unit does not manage waste which is toxic or hazardous. There is no evidence to suggest a past release from this unit, and it is well-maintained.

4.24 SWMU NO. 24 - POLYSTYRENE SLUDGE SATELLITE ACCUMULATION AREA (Photo 41)

Description

This unit is a Satellite Accumulation Area for Polystyrene Sludge. The unit is located on the north side of the Foam manufacturing building. The unit consists of a 55-gallon plastic drum positioned on a 3 foot by 10 foot concrete pad. The pad is surrounded by a 6 inch concrete berm. A 1.5 foot segment of the berm is covered with steel to reinforce the berm for loading and unloading of the drum from the containment area. The secondary containment capacity of the unit is 79 gallons. The 55-gallon drum has a small opening at the top to allow a small rubber hose to feed the waste into the drum.

The unit is also comprised of an explosion-proof room that contains two reservoir tanks and a high pressure filter used to filter the pentane and pipe it back into the manufacturing process. The building is approximately 10 feet by 10 feet, with a height of approximately 10 feet. The two reservoir tanks are attached to a wall in the building.

Status

The unit stores hazardous waste for less than 90 days. Therefore, it is not subject to RCRA permit or interim status requirements, but must be operated in accordance with 40 CFR 262.34. It was installed in 1986, and is currently active.

Waste Type

The unit manages polystyrene sludge (F001 and D005) from the Pentane Recovery System in the Foam plant.

Waste Management

The unit receives the liquid pentane from the Pentane Recovery System via pipeline. The pentane is pumped to a high pressure pumping room into two reservoir tanks prior to going through the high pressure filter. The waste is drained by gravity through a small hose and outside the room to the 55-gallon accumulation drum. Once the drum is full (approximately 90 days) it is taken to SWMU 20 for temporary storage before it is shipped off-site for disposal.

The pentane is then forced through the high pressure filter and sent via pipeline back to the polystyrene process.

Environmental Releases

Facility representatives were not aware of any releases to any environmental media from this unit. During the VSI conducted on January 6, 1992, the area was well-maintained. There was no evidence of staining on the concrete pad or on the berm.

Remedial Action Taken

There has been no reported remedial action at this SWMU.

Suggested Action

ICF suggests that no RFI be conducted at this time for this unit.

Reasons

The unit is managed on a bermed concrete pad. There is no evidence to suggest a past release from this unit, and it is well-maintained.

4.25 SWMU NO. 25 - FOAM PLANT NONHAZARDOUS DRUM STORAGE AREA (Photos 42 and 43)

Description

This unit consists of a number of 55-gallon drums and one 340-gallon waste tank. At the time of the VSI conducted on January 6, 1992, the 340-gallon tank was full. The unit is located east of the old roll storage building. The drums and tank are managed inside a bermed secondary containment concrete pad. The dimensions of the concrete pad are 23 feet by 13 feet. The pad is surrounded by a 1.5 inch high concrete berm. The pad has a small concrete ramp at the southern end used for loading and unloading drums. The secondary capacity of the containment area is 538 gallons. Just outside the containment structure is a locked drain. During the VSI conducted on January 6, 1992, the outside of the tank appeared clean. There was no evidence of staining in the concrete containment area either on the pad or on the berm. In addition, there was no evidence of staining outside the secondary containment area.

Status

The unit is not regulated under RCRA Subtitle C because it does not manage hazardous waste. The unit does, however, manage nonhazardous waste that is subject to RCRA Subtitle D regulation. It was installed in 1981, and is currently active.

Waste Type

The unit manages waste gearbox and hydraulic oils in 55-gallon drums, empty aerosol cans, and empty steel drums. At the time of the VSI conducted on January 6, 1992, some empty drums were labeled as hazardous waste, but facility representatives stated that the drums had never been used. The drums appeared new. The 340-gallon tank also manages waste oil. At the time of the VSI conducted on January 6, 1992, the tank had a label that identified the waste as hazardous. However, the waste type noted on the label was waste oil. Facility representatives stated that the wrong label had been applied to the tank, and stated that the waste contained in the tank was waste oil.

Waste Management

The unit receives waste from the maintenance department of the Foam plant. Used oil is transferred from 55-gallon drums into the 340-gallon tank. The tank is manifested off-site for fuel blending approximately every 45 days. Steel drums and aerosol cans are placed in SWMU 22 for sale to DLT Salvage for recycle.

Environmental Releases

Facility representatives were not aware of any releases to any environmental media from this unit. During the VSI conducted on January 6, 1992, the area was well-maintained. There was no evidence of staining on the concrete pad or on the berm.

Remedial Action Taken

There has been no reported remedial action at this SWMU.

Suggested Action

ICF suggests that no RFI be conducted at this time for this unit.

Reasons

The unit does not handle waste that is toxic or hazardous. The waste is managed within a bermed secondary containment structure. There is no evidence to suggest a past release from the unit, and it is well-maintained.

4.26 SWMU NO. 26 - FOAM PLANT HAZARDOUS WASTE DRUM STORAGE AREA (Photos 44 and 45)

Description

The Foam Plant Hazardous Waste Drum Storage Area is located on the north side of the old roll storage building. The unit consists of numerous 5-gallon and 55-gallon drums of waste, drums of product, and a mobile pump system managed inside a bermed secondary containment structure. The containment structure consists of a concrete pad surrounded by a 3 inch concrete berm. The area is covered by a sloped corrugated tin roof. The dimensions of the containment area are approximately 40 feet by 15 feet. The secondary containment capacity of the unit is 1,285 gallons. The containment structure also has a concrete ramp for loading and unloading wastes and product.

Status

The unit stores hazardous waste for less than 90 days. Therefore, it is not subject to RCRA permit or interim status requirements, but must be operated in accordance with 40 CFR 262.34. It was installed in 1986, and is currently active.

Waste Type

At the time of the VSI conducted on January 6, 1992, wastes contained in the unit included drums of petroleum waste oil, PCB capacitors, gear box oil (product), and non-PCB capacitors (one 5-gallon drum). The area also contained a pump/drum system used to collect waste oil from drip pans in the process plant.

Waste Management

The unit receives wastes from the various process areas in the Foam plant. A mobile pump/drum system is used to collect waste oil from machinery and the waste oil is brought to the unit and transferred to 55-gallon drums. The drums are then shipped off-site to Gibraltar Chemical Resources for fuel blending. At the time of the VSI conducted on January 6, 1992, the unit also contained PCB-contaminated capacitors and non-PCB capacitors that had recently been removed from service at the facility. These wastes are currently awaiting off-site disposal. The capacitors are stored in 5-gallon drums until they are shipped off-site to General Electric of Illinois for incineration. Facility representatives stated that the storage of these wastes was a one-time occurrence and that no additional PCB wastes will be generated at the facility. In addition, facility representatives stated that the PCB wastes will not be stored for more than 90 days.

Environmental Releases

Facility representatives were not aware of any releases to any environmental media from this unit. During the VSI conducted on January 6, 1992, the unit was well-maintained. There was no evidence of staining on the concrete pad or on the berm.

Remedial Action Taken

There has been no reported remedial action at this SWMU.

Suggested Action

No further action is suggested at this time for this unit.

Reasons

Wastes are in containers and are managed inside a bermed secondary containment structure covered with a roof. There is no evidence to suggest a past release from this unit, and it is well-maintained.

4.27 SWMU NO. 27 - CONSTRUCTION DEBRIS ACCUMULATION AREA (Photos 46 and 47)

Description

The Construction Debris Accumulation Area is located on the north side of the old roll storage building. The unit covers an area of approximately 150,000 square feet. The unit consists of an area of ground covered with shrubbery and mounds of construction debris. The unit is relatively flat with scattered trenches. There is no secondary containment structure associated with the unit.

Status

The unit is not RCRA-regulated, therefore it is not subject to the design and operating standards in 40 CFR Part 264 Subpart I. It began operation in 1989, and is currently active.

Waste Type

At the time of the VSI conducted on January 6, 1992, the unit contained an area of 212 yards of pea gravel from UST removal that contains hazardous constituents, soils and other debris from on-site ditch dredging activities, waste concrete from on-site construction, scrap metal, and used wooden pallets.

Waste Management

The unit is used to temporarily store various nonhazardous debris generated during normal facility operations. The waste materials are stored temporarily until they can be shipped off-site for disposal, recycle, or reuse. The pea gravel stored in the unit was generated during May and June of 1991 as part of closure of SWMU 1. Prior to being placed in the unit, the pea gravel was stored in an approved diked area for testing. The gravel was found to contain small amounts of naphtha, lead, and arsenic, below regulatory levels. The gravel was then hauled to the unit and placed on a plastic liner. The gravel will be reused as backfill during removal of an additional UST. The ditch dredge material will be reused as part of the facility's landscaping projects.

Environmental Releases

Facility representatives were not aware of any releases to any environmental media from this unit. During the VSI conducted on January 6, 1992, the area was well-maintained. There was no evidence of staining or dead vegetation at the unit.

Remedial Action Taken

There has been no reported remedial action at this SWMU.

Suggested Action

ICF recommends that an RFI be conducted for this SWMU.

Reasons

The area manages a waste that contains hazardous constituents. The unit is not lined and does not have a secondary containment structure. The pea gravel from the removal of the USTs at SWMU 1 was tested and found to contain small amounts of naphtha, lead, and arsenic.

Although not determined during the VSI conducted on January 6, 1992, this area is likely to receive hazardous and nonhazardous waste generated from plant operations.

4.28 SWMU NO. 28 - FOAM PLANT AIR ABATEMENT UNITS (Photo 48)

Description

The SWMU consists of bag house units that act as a terminal separator for the Foam plant's pneumatic conveying systems. The units are located in three general areas of the plant: (1) on the south side of the foam manufacturing building; (2) on the roof of the foam plant; and (3) inside the foam plant. Each bag house unit consists of a number of filter bags contained in an enclosed structure. There are 12 silos on the south side of the foam plant each containing 48 filter bags. Each silo measures approximately 20 feet in height by 10 feet in diameter. The two units on the roof of the plant contain 64 filter bags each. The two units located inside the plant each contain 24 filter bags. All of the units are constructed of steel. Each unit is equipped with a pulse system and an alarm.

Status

This SWMU is not RCRA-regulated. It is permitted by the Texas Air Control Board under permit number R-3372. This permit expires in 1995. The units were installed in 1976, and are currently active.

Waste Type

The units manage polystyrene fluff from the manufacturing process.

Waste Management

The bag house units receive polystyrene fluff from the manufacturing department of the Foam plant. As part of the plant's air abatement program, polystyrene fluff is air conveyed into the various units. The fluff collects on the outside of the filter bags. An automatic pulse system shakes the dust off the bags, where it falls to the bottom of the unit. The fluff is then collected and sent back to the production process. The units are equipped with high level alarms that sound when filter bags are broken. When a filter bag breaks, it is sent to the Temple Landfill for disposal.

Environmental Releases

Facility representatives were not aware of any releases to any environmental media from this unit. There was no evidence of polystyrene waste accumulation around the units.

Remedial Action Taken

There has been no reported remedial action at this SWMU.

Suggested Action

ICF recommends that no RFI be conducted for this SWMU.

Reasons

The units are entirely enclosed. The units are equipped with an alarm to detect any breakage of the filters. There is no reason to suggest a past release from this SWMU, and the units are well-maintained.

5.0 AREAS OF CONCERN

This section discusses one AOC identified by ICF after the PR and VSI. An AOC is not necessarily a SWMU; however, such an area either is potentially contaminated or provides a contaminant release pathway. The AOC is identified in Appendix B.

5.1 AOC NO. 1 - ISOPENTANE UNDERGROUND STORAGE TANK (Photos 49 and 50)

This area of concern consists of a 50,000 gallon underground storage tank for isopentane. The unit is located to the east of the old roll storage building. The tank is an ASME code pressure vessel designed for 20 psi of pressure. It is constructed of steel, and is positioned in a limestone pit. The tank is filled by rail tank car through a 3 inch above-ground pipe. The last 40 feet of this pipe is underground and is sleeved to prevent escape of isopentane. The tank is vented back to the rail car by a separate line to prevent emissions from the tank. The isopentane is piped by above-ground conveyance lines into the polystyrene manufacturing process inside the Foam plant.

The unit also contains an abandoned underground conveyance system formerly used to convey the isopentane from the rail car to the tank and to convey the isopentane to the production process. This system was taken out of service in 1981. The pipes for this system are still in place.

This unit is not RCRA-regulated. Facility representatives stated that the unit will be removed by June 1992. At this time, a new tank will be installed.

At some time on September 14, 1981, a release of approximately 10,000 gallons of isopentane from a below-ground 3 inch low-pressure transfer line occurred. Isopentane leaked into an underground trench near the old roll storage building. The facility notified the Texas Department of Water Resources, Region VI EPA, the TWC, and the City of Temple of the spill. Facility representatives stated that they received no response from any of these agencies.

In response to the incident, Mobil Chemical Company pumped out approximately 250 55-gallon drums of product and contaminated ground water. The contaminated water was then manifested off-site for disposal. The company installed 5 monitoring wells and currently monitors the wells monthly on a voluntary basis. At the time of the VSI conducted on January 6, 1992, facility representatives stated that current levels of isopentane in the monitoring wells reached concentrations ranging from not detected to 38 ppm.

Once the ground water had been removed, the company abandoned the underground conveyance system and installed an above-ground system which is currently in operation.

The unit is expected to be closed, in accordance with an approved closure plan, in June of 1992. Facility representatives stated that soil sampling and analysis will be conducted at the time of closure and any contaminated soils will be removed. The facility is currently drafting a closure plan for the unit.

ICF recommends that Mobil Chemical Company continue coordination with EPA, TWC, and the City of Temple to remediate the area and close the unit.

6.0 HUMAN AND ENVIRONMENTAL TARGETS

Because Mobil Chemical Company is located in an industrial park, the potential of exposure to local residents is limited. The facility employs 863 full-time staff and is surrounded by commercial and residential land to the east and southeast, commercial land to the south, industrial land to the west, and ranch/farmland to the north. The facility is secured by a fence.

This section discusses the potential human and environmental targets of a release of hazardous material into the environment from SWMUs at the Mobil Chemical Company facility. Potential pathways include air, soil, subsurface gas, surface water, and ground water.

6.1 AIR

Mobil Chemical Company has two active air permits C-20229 and R03372 for emissions from the General Products plant and the Foam plant. Air emissions at both plants originate during the conveyance of polyethylene and polystyrene fluff which is reclaimed and sent back to the front end of the processes.

The probability of emissions affecting employees from these emissions is low, because the conveyance system is completely enclosed and a vacuum system is used to reduce any fugitive emissions. The facility installed an air abatement system in 1976 to further reduce outside air emissions of the polyethylene and polystyrene fluff, thus air releases are not likely to affect individuals in surrounding communities.

One additional potential air emissions source is the Sandblasting Unit (SWMU 11). At the time of the VSI conducted on January 6, 1992, the area around the unit was covered with sand and dust generated during sandblasting operations.

There is no sampling data available to characterize the wastes from this unit. However, due to the nature of the operations at this unit (high pressure sandblasting of metal parts), releases from this unit and subsequent inhalation of this particulate matter may pose a threat to human health.

6.2 SOIL

Surface soil contamination may exist at AOC 1, the Isopentane Underground Storage Tank. A release of approximately 10,000 gallons of isopentane occurred from this unit in 1981. There is no specific analytical data characterizing the extent of soil contamination occurring as a result of this release.

There is a moderate potential for surface soil contamination at SWMU 27. The SWMU manages waste pea gravel that contains small amounts of naphtha, lead, and arsenic.

The probability of environmental or human targets being directly affected by a release to soils from these units is minimal.